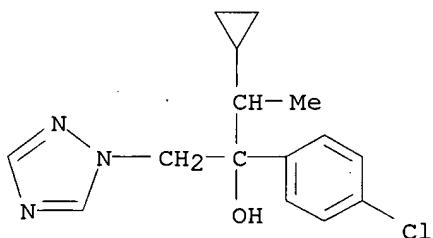


(FILE 'HOME' ENTERED AT 18:36:10 ON 01 JUN 2003)

FILE 'CAPLUS' ENTERED AT 18:36:14 ON 01 JUN 2003

L1 304 S CYPROCONAZOLE
L2 3881 S TRIADIMEFON OR TRIADIMENOL OR BITERTANOL OR TEBUCONAZOLE OR
P
L3 96 S L1 (P) L2
L4 72 S L1 (3A) L2
L5 41 S L1 (A) L2

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 94361-06-5 REGISTRY
CN 1H-1,2,4-Triazole-1-ethanol, .alpha.- (4-chlorophenyl)-.alpha.- (1-
cyclopropylethyl) - (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Alto
CN Alto 100
CN Alto 100SL
CN Atemi
CN Atemi C
CN Cyproconazole
CN SAN 619F
CN SN 108266
FS 3D CONCORD
DR 113096-99-4
MF C15 H18 Cl N3 O
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, CA, CABA,
CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, MEDLINE,
MRCK*,
NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

314 REFERENCES IN FILE CA (1957 TO DATE)
44 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
315 REFERENCES IN FILE CAPLUS (1957 TO DATE)

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Trying 3106016892...Open

```
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FILE 'HOME' ENTERED AT 09:05:20 ON 14 MAR 2002

| | | |
|----------------------|------------|---------|
| => file registry | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.15 | 0.15 |

FILE 'REGISTRY' ENTERED AT 09:05:34 ON 14 MAR 2002
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STRUCTURE FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1
DICTIONARY FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved. Also, note that searches
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worldwide, or send an e-mail to help@cas.org for further assistance or to
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=> s cyproconazole/cn
L1 1 CYPROCONAZOLE/CN

=> s tebuconazole/cn
L2 1 TEBUCONAZOLE/CN

| | | |
|----------------------|------------|---------|
| => file caplus | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 8.32 | 8.47 |

FILE 'CAPLUS' ENTERED AT 09:06:23 ON 14 MAR 2002
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FILE COVERS 1907 - 14 Mar 2002 VOL 136 ISS 11
FILE LAST UPDATED: 12 Mar 2002 (20020312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

=> s 11 and 12 and industrial materials
 273 L1
 653 L2
 194179 INDUSTRIAL
 42 INDUSTRIALS
 194201 INDUSTRIAL
 (INDUSTRIAL OR INDUSTRIALS)
 1411418 MATERIALS
 3 MATERIALSES
 1411419 MATERIALS
 (MATERIALS OR MATERIALSES)
 946 INDUSTRIAL MATERIALS
 (INDUSTRIAL (W) MATERIALS)
L3 0 L1 AND L2 AND INDUSTRIAL MATERIALS

=> s 11 and 12 and leather
 273 L1
 653 L2
 38002 LEATHER
 4643 LEATHERS
 38709 LEATHER
 (LEATHER OR LEATHERS)
L4 2 L1 AND L2 AND LEATHER

=> d 14 1-2 all

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN 1997:440126 CAPLUS
DN 127:46479
TI Water-based, solvent- and emulsifier-free microbicidal compositions.
IN Buschhaus, Hans-Ulrich; Exner, Otto; Kugler, Martin; Nagano, Yukihiro
PA Bayer A.-G., Germany
SO Ger. Offen., 12 pp.

CODEN: GWXXBX
DT Patent
LA German
IC ICM A01N043-653
ICS A01N043-50; A01N043-40
ICI A01N043-653, A01N043-50, A01N043-40
CC 5-2 (Agrochemical Bioregulators)
Section cross-reference(s): 43, 45

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|----------|
| PI | DE 19543477 | A1 | 19970528 | DE 1995-19543477 | 19951122 |
| | CA 2238033 | AA | 19970529 | CA 1996-2238033 | 19961111 |
| | WO 9718713 | A1 | 19970529 | WO 1996-EP4919 | 19961111 |
| | W: AU, BB, BG, BR, BY, CA, CN, CZ, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9675694 | A1 | 19970611 | AU 1996-75694 | 19961111 |
| | EP 863709 | A1 | 19980916 | EP 1996-938169 | 19961111 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL | | | | |
| | JP 2000500475 | T2 | 20000118 | JP 1997-519342 | 19961111 |
| | BR 9611746 | A | 20000328 | BR 1996-11746 | 19961111 |
| PRAI | DE 1995-19543477 | A | 19951122 | | |
| | WO 1996-EP4919 | W | 19961111 | | |
| OS | MARPAT 127:46479 | | | | |
| AB | The title compns. comprise azole fungicide(s) (triadimefon, triadimenol, tebuconazole, hexaconazole, etc.), nitromethylene or related insecticide(s) and quaternary ammonium fungicide(s). The compns. are useful for the preservation of leather , wood and tech. materials. | | | | |
| ST | microbicial compn wood leather tech | | | | |
| IT | Antibacterial agents | | | | |
| | Fungicides | | | | |
| | (industrial; water-based, solvent- and emulsifier-free microbicial compns.) | | | | |
| IT | Alkylbenzyldimethylammonium chlorides | | | | |
| | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) | | | | |
| | (mixts. contg.; microbicial compn. for preservation of leather , wood and tech. materials) | | | | |
| IT | Quaternary ammonium compounds, biological studies | | | | |
| | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) | | | | |
| | (mixts. contg.; microbicial compns. for preservation of leather , wood and tech. materials) | | | | |
| IT | Leather | | | | |
| | Wood preservatives | | | | |
| | (water-based, solvent- and emulsifier-free microbicial compns.) | | | | |
| IT | 191226-82-1 | | | | |
| | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) | | | | |
| | (microbicial compn. for preservation of leather , wood and tech. materials) | | | | |
| IT | 43121-43-3D, Triadimefon, mixts. contg. 55219-65-3D, Triadimenol, mixts. contg. 60207-31-0D, Azaconazole, mixts. contg. 60207-90-1D, Propiconazole, mixts. contg. 67747-09-5D, Prochloraz, mixts. contg. 79983-71-4D, Hexaconazole, mixts. contg. 94361-06-5D , Cyproconazole, mixts. contg. 101336-63-4D, mixts. contg. 107534-96-3D , Tebuconazole, mixts. contg. 120983-64-4D, mixts. contg. 130400-55-4D, mixts. contg. 131748-54-4D, mixts. contg. 131748-55-5D, mixts. contg. 136516-18-2D, mixts. contg. 138261-41-3D, | | | | |

Imidacloprid, mixts. contg. 160430-64-8D, mixts. contg. 172333-81-2D,
 mixts. contg.
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (microbicial compns. for preservation of **leather**, wood and
 tech. materials)

IT 7173-51-5, Didecyldimethylammonium chloride
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (mixts. contg.; microbicial compn. for preservation of **leather**
 , wood and tech. materials)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:33961 CAPLUS
 DN 126:61838
 TI Phenolic compound microbicides for processing hides and **leather**
 IN Rother, Heinz-Joachim; Kugler, Martin; Rehbein, Hartmut
 PA Bayer A.-G., Germany
 SO Ger. Offen., 3 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A01N031-08
 ICS A01N043-84; A01N043-647; A01N043-52; A01N043-50
 ICI A01N031-08, A01N043-84, A01N043-647, A01N043-52, A01N043-50
 CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 5
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|----------|
| PI | DE 19517840 | A1 | 19961121 | DE 1995-19517840 | 19950516 |
| | CA 2220992 | AA | 19961121 | CA 1996-2220992 | 19960503 |
| | WO 9636739 | A1 | 19961121 | WO 1996-EP1845 | 19960503 |
| | W: AU, BB, BG, BR, BY, CA, CN, CZ, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9656935 | A1 | 19961129 | AU 1996-56935 | 19960503 |
| | AU 704282 | B2 | 19990415 | | |
| | EP 827553 | A1 | 19980311 | EP 1996-915014 | 19960503 |
| | R: AT, BE, DE, ES, GB, IT, NL, SE, PT, FI | | | | |
| | BR 9609081 | A | 19990202 | BR 1996-9081 | 19960503 |
| | ZA 9603849 | A | 19961121 | ZA 1996-3849 | 19960515 |
| | US 5888415 | A | 19990330 | US 1997-952413 | 19971113 |
| | US 6083414 | A | 20000704 | US 1998-213584 | 19981217 |
| PRAI | DE 1995-19517840 | A | 19950516 | | |
| | WO 1996-EP1845 | W | 19960503 | | |
| AB | The microbicial life is extended for phenolic compds. in the title process by addn. of triazoles, benzimidazoles, imidazoles, and(or) morpholine derivs. | | | | |
| ST | phenolic compd microbicide hide leather processing; morpholine deriv stabilizer phenolic microbicide; imidazole deriv stabilizer phenolic microbicide; benzimidazole deriv stabilizer phenolic microbicide; triazole deriv stabilizer phenolic microbicide | | | | |
| IT | Antibacterial agents Hide Leather Stabilizing agents (phenolic compd. microbicides contg. azoles and(or) morpholine derivs. as stabilizers for processing hides and leather) | | | | |
| IT | 59-50-7, p-Chloro-m-cresol 90-43-7, o-Phenylphenol RL: BAC (Biological activity or effector, except adverse); BUU (Biological | | | | |

use, unclassified); BIOL (Biological study); USES (Uses)
(phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
as stabilizers for processing hides and leather)

IT 88-04-0 92-69-3, p-Phenylphenol 97-23-4, Dichlorophen 120-32-1,
2-Benzyl-4-chlorophenol 122-99-6 580-51-8, m-Phenylphenol
25154-55-6, Nitrophenol 25167-83-3, Tetrachlorophenol 25376-38-9,
Tribromophenol

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
as stabilizers for processing hides and leather)

IT 61-82-5, Amitrole 141-91-3D, 2,6-Dimethylmorpholine, C8-16-alkyl derivs.
148-79-8 1593-77-7, Dodemorph 3878-19-1, Fuberidazole 17804-35-2,
Benomyl 22916-47-8, Miconazole 23593-75-1, Canesten 27220-47-9,
Econazole 27523-40-6, Isoconazole 35554-44-0, Imazalil 41083-11-8,
Azocyclotin 43121-43-3, Triadimefon 55179-31-2, Bitertanol
55219-65-3, Triadimenol 60207-31-0, Azaconazole 60207-90-1,
Propiconazole 60628-96-8, Bifonazole 61318-90-9, Sulconazole
66246-88-6, Penconazole 67564-91-4, Fenpropimorph 67747-09-5,
Prochloraz 68694-11-1, Triflumizole 76608-88-3, Triapentheneol
76674-05-0 76674-21-0, Flutriafol 76738-62-0 78613-35-1, Amorolfine
79983-71-4, Hexaconazole 81412-43-3, Tridemorph 83657-22-1,
Uniconazole 85509-19-9, Flusilazole 86598-92-7, Imibenconazole
88671-89-0, Myclobutanil 91315-15-0, Aldimorph **94361-06-5**,
Cyproconazole 101903-30-4, Pefurazoate 103112-36-3, Fenchlorazole
107534-96-3, Tebuconazole 111566-22-4, Isozophos 112281-77-3,
Tetraconazole 114369-43-6, Fenethanil 119006-77-8, Flutrimazole
119446-68-3, Difenoconazole 125116-23-6, Metconazole 129586-32-9
131983-72-7, Triticonazole 133855-98-8, Epoxiconazole 136426-54-5,
Fluquinconazole

RL: MOA (Modifier or additive use); USES (Uses)
(phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
as stabilizers for processing hides and leather)

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NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Sep 17 IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH
NEWS 3 Oct 09 Korean abstracts now included in Derwent World Patents Index
NEWS 4 Oct 09 Number of Derwent World Patents Index updates increased
NEWS 5 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 6 Oct 22 Over 1 million reactions added to CASREACT
NEWS 7 Oct 22 DGENE GETSIM has been improved
NEWS 8 Oct 29 AAASD no longer available
NEWS 9 Nov 19 New Search Capabilities USPATFULL and USPAT2
NEWS 10 Nov 19 TOXCENTER(SM) - new toxicology file now available on STN
NEWS 11 Nov 29 COPPERLIT now available on STN
NEWS 12 Nov 29 DWPI revisions to NTIS and US Provisional Numbers
NEWS 13 Nov 30 Files VETU and VETB to have open access
NEWS 14 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 15 Dec 10 DGENE BLAST Homology Search
NEWS 16 Dec 17 WELDASEARCH now available on STN
NEWS 17 Dec 17 STANDARDS now available on STN
NEWS 18 Dec 17 New fields for DPCI
NEWS 19 Dec 19 CAS Roles modified
NEWS 20 Dec 19 1907-1946 data and page images added to CA and CAplus
NEWS 21 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 22 Jan 25 Searching with the P indicator for Preparations
NEWS 23 Jan 29 FSTA has been reloaded and moves to weekly updates
NEWS 24 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 25 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 26 Mar 08 Gene Names now available in BIOSIS

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002

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NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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| | | |
|----------------------|------------|---------|
| => file registry | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.15 | 0.15 |

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DICTIONARY FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches
during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved. Also, note that searches
conducted using the PREP role indicator were not affected.

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worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> s cyproconazole/cn
L1 1 CYPROCONAZOLE/CN

=> s tebuconazole/cn
L2 1 TEBUCONAZOLE/CN

| | | |
|----------------------|------------|---------|
| => file caplus | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 8.64 | 8.79 |

FILE 'CAPLUS' ENTERED AT 08:40:46 ON 14 MAR 2002
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FILE COVERS 1907 - 14 Mar 2002 VOL 136 ISS 11
FILE LAST UPDATED: 12 Mar 2002 (20020312/ED)

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The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

```
=> s 11 and 12
      273 L1
      653 L2
L3      147 L1 AND L2
```

```
=> d 13 1-5 all
```

```
L3      ANSWER 1 OF 147 CAPLUS COPYRIGHT 2002 ACS
AN      2001:819022 CAPLUS
DN      136:33241
TI      Protective and systemic fungicides and inducer of resistance BTH on the control of fig rust
AU      Marchi, Carlos; de Resende, Mario L. V.; Chalfun, Nilton N. J.; Pozza, Edson A.
CS      Department de Fitopatologia, UFLA, Lavras, Brazil
SO      Summa Phytopathologica (2001), 27(2), 235-240
        CODEN: SUPHDV; ISSN: 0100-5405
PB      Grupo Paulista de Fitopatologia
DT      Journal
LA      Portuguese
CC      5-2 (Agrochemical Bioregulators)
AB      The objective of this study was to compare the efficacy of fungicides and of the chem. inducer of resistance BTH in fig rust (Phakopsora nishidiana) control. The expt. was conducted in the agricultural year of 1998/1999 in the orchard of UFLA/Lavras-MG, using the variety Roxo de Valinhos, with three years of age. Fig trees were submitted to the following treatments (doses of the a. i./ 100L of H2O): 1 - check; 2 - BTH 500 WG (100 g); 3 - BTH 500 WG (250 g); 4 - cyproconazole 100 SC (3 g); 5 - azoxystrobin 500 WG (8 g); 6 - tebuconazole 200 CE (15 g); 7 - mancozeb 445 SC (160 g); and 8 - azoxystrobin 500 WG (8 g) alternated with copper oxychloride 350 PM (105 g). The expt. was set in a randomized block design, with four replications and three plants per plot. Every fifteen days, evaluations of disease incidence and severity percentage of remaining leaves and
```

measurements of the branches were carried out. Also the no. and total wt. of fruits from ten harvests were evaluated. The fungicide azoxystrobin was the more efficient for control of fig rust. The cyproconazole presented efficiency in the control of the disease, however it was phytotoxic. Relative control of the disease compared with tebuconazole was obtained by using mancozeb or azoxystrobin alternated with copper oxichloride. In relation to the possibility of inducing rust resistance in fig, it should be better studied by applying lower dosages, with no phytotoxic effects.

- ST fungicide resistance inducer BTH fig Phakopsora
IT Phakopsora nishidana
 (protective and systemic fungicides and inducer of resistance BTH for control of)
IT Disease resistance, plant
 Fig (Ficus carica)
 Fungicides
 (protective and systemic fungicides and inducer of resistance BTH for control of fig rust)
IT 135158-54-2, BTH
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (inducer of resistance for control of fig rust)
IT 1332-40-7, Copper oxychloride 8018-01-7, Mancozeb 94361-06-5,
 Cyproconazole 107534-96-3, Tebuconazole 131860-33-8,
 Azoxystrobin
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (protective and systemic fungicides for control of fig rust)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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L3 ANSWER 2 OF 147 CAPLUS COPYRIGHT 2002 ACS

AN 2001:780351 CAPLUS

DN 135:299954

TI Fungicidal compositions comprising methoxyiminoacetamide derivatives.

IN Wachendorff-Neumann, Ulrike; Seitz, Thomas; Gayer, Herbert; Heinemann, Ulrich; Krueger, Bernd-Wieland; Kraemer, Wolfgang; Assmann, Lutz

PA Bayer A.-G., Germany

SO Ger. Offen., 40 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM A01N035-10
ICS A01N043-653; A01N039-02; A01N059-16; A01N047-10; A01N043-828;
A01N043-88

CC 5-2 (Agrochemical Bioregulators)

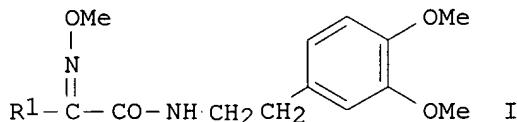
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|------------------|----------|
| PI | DE 10019758 | A1 | 20011025 | DE 2000-10019758 | 20000420 |
| | WO 2001080641 | A2 | 20011101 | WO 2001-EP4042 | 20010409 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

PRAI DE 2000-10019758 A 20000420

OS MARPAT 135:299954

GI



AB Fungicidal compns. comprise methoxyiminoacetamide derivs. I (R1 = fluorine-, chlorine-, bromine-, Me-, Et-, Pr- iso-Pr-, Bu-, iso-Bu-, tert-Bu-, methoxy-, ethoxy- or phenoxy-substituted or unsubstituted Ph, 2-naphthyl, 1,2,3,4-tetrahydronaphthyl, indanyl, 2-benzofuranyl, 2-benzothienyl, 2-thienyl or 2-furanyl) and any of known 58 fungicides.

ST fungicide methoxyiminoacetamide deriv mixts

IT Fungicides

(compns. comprising methoxyiminoacetamide derivs.)

IT 133-06-2D, Captan, mixts. with methoxyiminoacetamide derivs. 133-07-3D, Folpet, mixts. with methoxyiminoacetamide derivs. 137-26-8D, Thiram, mixts. with methoxyiminoacetamide derivs. 731-27-1D, mixts. with methoxyiminoacetamide derivs. 1085-98-9D, mixts. with methoxyiminoacetamide derivs. 1897-45-6D, Chlorothalonil, mixts. with methoxyiminoacetamide derivs. 8018-01-7D, Mancozeb, mixts. with methoxyiminoacetamide derivs. 12071-83-9D, Propineb, mixts. with methoxyiminoacetamide derivs. 12122-67-7D, Zineb, mixts. with methoxyiminoacetamide derivs. 12427-38-2D, Maneb, mixts. with methoxyiminoacetamide derivs. 13598-36-2D, Phosphonic acid, mixts. with methoxyiminoacetamide derivs. 24579-73-5D, Propamocarb, mixts. with methoxyiminoacetamide derivs. 32809-16-8D, Procymidone, mixts. with methoxyiminoacetamide derivs. 36734-19-7D, Iprodione, mixts. with methoxyiminoacetamide derivs. 39148-24-8D, Fosetyl-Al, mixts. with methoxyiminoacetamide derivs. 53112-28-0D, mixts. with methoxyiminoacetamide derivs. 57837-19-1D, Metalaxyl, mixts. with methoxyiminoacetamide derivs. 57966-95-7D, Cymoxanil, mixts. with methoxyiminoacetamide derivs. 60207-90-1D, Propiconazole, mixts. with methoxyiminoacetamide derivs. 66246-88-6D, Penconazole, mixts. with methoxyiminoacetamide derivs. 67747-09-5D, Prochloraz, mixts. with methoxyiminoacetamide derivs. 70630-17-0D, Metalaxyl M, mixts. with methoxyiminoacetamide derivs. 71626-11-4D, Benalaxyl, mixts. with methoxyiminoacetamide derivs. 77732-09-3D, Oxadixyl, mixts. with

methoxyiminoacetamide derivs. 79622-59-6D, Fluazinam, mixts. with
methoxyiminoacetamide derivs. 79983-71-4D, Hexaconazole, mixts. with
methoxyiminoacetamide derivs. 85509-19-9D, Flusilazole, mixts. with
methoxyiminoacetamide derivs. 87130-20-9D, Diethofencarb, mixts. with
methoxyiminoacetamide derivs. 88671-89-0D, Myclobutanil, mixts. with
methoxyiminoacetamide derivs. 94361-06-5D, Cyproconazole, mixts.
with methoxyiminoacetamide derivs. 104030-54-8D, Carpropamid, mixts.
with methoxyiminoacetamide derivs. 107534-96-3D, Tebuconazole,
mixts. with methoxyiminoacetamide derivs. 110488-70-5D, Dimethomorph,
mixts. with methoxyiminoacetamide derivs. 112281-77-3D, Tetraconazole,
mixts. with methoxyiminoacetamide derivs. 114369-43-6D, Fenbuconazole,
mixts. with methoxyiminoacetamide derivs. 117428-22-5D, Picoxystrobin,
mixts. with methoxyiminoacetamide derivs. 118134-30-8D, Spiroxamine,
mixts. with methoxyiminoacetamide derivs. 119446-68-3D, Difenoconazole,
mixts. with methoxyiminoacetamide derivs. 120116-88-3D,
Cyamidazosulfamid, mixts. with methoxyiminoacetamide derivs.
121552-61-2D, mixts. with methoxyiminoacetamide derivs. 124495-18-7D,
Quinoxifen, mixts. with methoxyiminoacetamide derivs. 126833-17-8D,
Fenhexamid, mixts. with methoxyiminoacetamide derivs. 131341-86-1D,
Fludioxonil, mixts. with methoxyiminoacetamide derivs. 131752-26-6D,
mixts. with methoxyiminoacetamide derivs. 131807-57-3D, Famoxadone,
mixts. with methoxyiminoacetamide derivs. 131860-33-8D, Azoxystrobin,
mixts. with methoxyiminoacetamide derivs. 133855-98-8D, Epoxiconazole,
mixts. with methoxyiminoacetamide derivs. 135158-54-2D,
Acibenzolar-S-methyl, mixts. with methoxyiminoacetamide derivs.
138261-41-3D, Imidacloprid, mixts. with methoxyiminoacetamide derivs.
140923-17-7D, Iprovalicarb, mixts. with methoxyiminoacetamide derivs.
141517-21-7D, Trifloxystrobin, mixts. with methoxyiminoacetamide derivs.
143390-89-0D, Kresoxim-methyl, mixts. with methoxyiminoacetamide derivs.
149708-54-3D, mixts. with methoxyiminoacetamide derivs. 156052-68-5D,
Zoxamide, mixts. with methoxyiminoacetamide derivs. 161326-34-7D,
Fenamidone, mixts. with methoxyiminoacetamide derivs. 162650-77-3D,
Ehaboxam, mixts. with methoxyiminoacetamide derivs. 172524-76-4D,
mixts. with methoxyiminoacetamide derivs. 172719-88-9D, mixts. with
methoxyiminoacetamide derivs. 175013-18-0D, mixts. with
methoxyiminoacetamide derivs. 178928-70-6D, mixts. with
methoxyiminoacetamide derivs. 181624-76-0D, mixts. contg.
181627-13-4D, mixts. contg. 184870-42-6D, mixts. with
methoxyiminoacetamide derivs. 185336-79-2D, mixts. with
methoxyiminoacetamide derivs. 188027-78-3D, mixts. with
methoxyiminoacetamide derivs. 188425-85-6D, mixts. with
methoxyiminoacetamide derivs. 189892-69-1D, mixts. with
methoxyiminoacetamide derivs. 193740-76-0D, mixts. with
methoxyiminoacetamide derivs. 198758-59-7D, mixts. with
methoxyiminoacetamide derivs. 251579-08-5D, mixts. with
methoxyiminoacetamide derivs. 345206-00-0D, mixts. with
methoxyiminoacetamide derivs. 367262-88-2D, mixts. contg.
367262-94-0D, mixts. contg. 367262-97-3D, mixts. contg. 367263-03-4D,
mixts. contg.

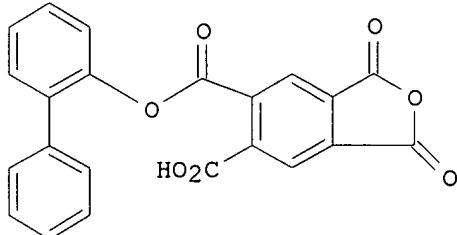
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(fungicidal compns.)

L3 ANSWER 3 OF 147 CAPLUS COPYRIGHT 2002 ACS
AN 2001:735421 CAPLUS
DN 135:257037
TI Preparation of arylisocyanates and arylanhydrides and derivatives thereof
as biocidal compounds
IN Bach, Sylvie; Chaumat, Gilles; Gandini, Alessandro; Seigle Murandi,
Francoise; Sage, Lucile
PA Commissariat A L'Energie Atomique, Fr.
SO Fr. Demande, 40 pp.
CODEN: FRXXBL

DT Patent
 LA French
 IC ICM A01N043-653
 ICS A01N043-08; A01N025-08; B27K003-38; D21H021-36
 CC 25-18 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 5

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | FR 2802771 | A1 | 20010629 | FR 1999-16474 | 19991224 |
| OS | CASREACT 135:257037; MARPAT 135:257037 | | | | |
| GI | | | | | |



IV

AB Title compds. OCN-R-NH-CO-X-A (I), Anh-R'-CO-X-A (II) and Ep-R'-CH(OH)-X-A (III) [R, R' = org. fragments; Anh = anhydride; Ep = epoxide; X-A is a residue of a biocidal mol. composed of A-XH] were prep'd. For instance 2-phenylphenol was reacted with 1,2,4,5-Benzenetetracarboxylic acid anhydride (THF, DBTL, DMAP, 65.degree.C, 15 min) to give IV. Examples of I and II had antifungal activity estd. at 0.01 to 1 nM. Substrates such as wood, paper, textiles, etc. can be covalently modified by reaction to I, II and III and will exhibit antifungal properties (2 examples, no data).

ST arylisocyanate arylanhydride biocide antifungal insecticide prepn;
 triazole biphenyl antifungal prepn

IT Antibacterial agents
 Fungicides
 Insecticides
 Wood preservatives

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and derivs. thereof as biocidal compds.)

IT 361391-49-3P 361391-50-6P 361391-51-7DP, polymer bound
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and derivs. thereof as biocidal compds.)

IT 77-58-7 619-60-3, DMAP
 RL: CAT (Catalyst use); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and derivs. thereof as biocidal compds.)

IT 75-09-2, Dichloromethane, uses 109-99-9, Tetrahydrofuran, uses
 110-86-1, Pyridine, uses

RL: NUU (Other use, unclassified); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and derivs. thereof as biocidal compds.)

IT 107534-96-3, Tebuconazole

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 89-32-7 90-43-7, 2-Hydroxybiphenyl 104-49-4, 1,4-Phenylene
diisocyanate **94361-06-5**, Cyproconazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of (hetero)aryl-alkyl-amido-aryl-
isocyanates/anhydrides and derivs. thereof as biocidal compds.)

L3 ANSWER 4 OF 147 CAPLUS COPYRIGHT 2002 ACS
AN 2001:679077 CAPLUS
DN 136:18051
TI Factors affecting diseases of winter wheat in England and Wales, 1989-98
AU Hardwick, N. V.; Jones, D. R.; Slough, J. E.
CS Central Science Laboratory, York, YO41 1LZ, UK
SO Plant Pathology (2001), 50(4), 453-462
CODEN: PLPAAD; ISSN: 0032-0862
PB Blackwell Science Ltd.
DT Journal
LA English
CC 11-5 (Plant Biochemistry)
AB Samples from 360 to 450 randomly selected winter wheat crops in England and Wales were collected annually during the milky ripe development stages (GS 73-75) from 1989 to 1998. The no. of samples from each region was proportional to the area of winter wheat grown. The percentage area affected by disease was assessed on the top two leaves and the ear, and the incidence and severity of stem base diseases were also recorded. An est. of the percentage area of the crop affected by barley yellow dwarf virus (BYDV) and take-all (*Gaeumannomyces graminis*) was made in the field. *Septoria leaf blotch* (*Septoria tritici*, teleomorph *Mycosphaerella graminicola*) was the major foliar disease recorded, with an av. max. severity of 7. cndot. 8% of the area of leaf 2 affected in 1998. Eyespot (*Tapesia* spp.) was the major stem base disease, with the highest incidence of stems falling into the damaging moderate plus severe categories (18. cndot. 9%) in 1998. Levels of powdery mildew (*Blumeria graminis*) showed a decline from 0. cndot. 4% of the area of leaf 2 in 1989 to 0. cndot. 1% in 1998. This fall was assocd. with a redn. in the proportion of disease-susceptible cultivars grown. There were significant regional differences in levels of *septoria leaf blotch*, brown rust (*Puccinia recondita*), eyespot, sharp eyespot (*Rhizoctonia cerealis*) and BYDV. The percentage of crops treated with a fungicide rose from 96% in 1989 to 98% in 1998 and the mean no. of spray applications per crop rose during this period from 2. cndot. 1 to 2. cndot. 5. A higher proportion of crops was treated with fungicides between the end of tillering and fifth node detectable (GS 24-35) than around flag leaf emergence (GS 36-48) or ear emergence (GS 49-71). Prior to 1994, the majority of late fungicide sprays was applied at, or after, ear emergence, but from 1994, the majority was applied around flag leaf emergence. The value and socioeconomic implications of the results are discussed.

ST wheat disease England Wales fungicide
IT Winter wheat
(disease; causes and factors affecting diseases of winter wheat in England and Wales)
IT Fungicides
(fungicides for control of winter wheat diseases in England and Wales)
IT *Puccinia recondita*
(winter wheat brown rust diseases in England and Wales caused by)
IT Barley yellow dwarf virus
Mycosphaerella graminicola
(winter wheat diseases in England and Wales caused by)
IT *Tapesia*
(winter wheat eyespot diseases in England and Wales caused by)

IT Septoria tritici
(winter wheat leaf-blotch diseases in England and Wales caused by)
IT Blumeria graminis
(winter wheat powdery mildew diseases in England and Wales caused by)
IT Ceratobasidium cereale
(winter wheat sharp eyespot diseases in England and Wales caused by)
IT Gaeumannomyces graminis
(winter wheat take-all diseases in England and Wales caused by)
IT 110-91-8, Morpholine, biological studies 10605-21-7, Carbendazim
17804-35-2, Benomyl 43121-43-3, Triadimefon 55219-65-3, Triadimenol
60207-90-1, Propiconazole 67306-00-7, Fenpropidin 67564-91-4,
Fenpropimorph 67747-09-5, Prochloraz 76674-21-0, Flutriafol
81412-43-3, Tridemorph 85509-19-9, Flusilazole 94361-06-5,
Cyproconazole 107534-96-3, Tebuconazole 114369-43-6,
Fenbuconazole 116255-48-2, Bromuconazole 119446-68-3, Difenoconazole
131860-33-8, Azoxystrobin 133855-98-8, Epoxiconazole 143390-89-0,
Kresoxim-methyl
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(fungicides for control of winter wheat diseases in England and Wales)

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD

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- (18) Hardwick, N; Proceedings of the Crop Protection in Northern Britain 1993 1993, P109
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 (39) Turner, J; Proceedings of the 9th International Rapeseed Congress 1995 1995, P640
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L3 ANSWER 5 OF 147 CAPLUS COPYRIGHT 2002 ACS

AN 2001:663606 CAPLUS

DN 135:222833

TI Fungicidal and algicidal compositions containing isothiazolinones and triazoles

IN Kameda, Koji; Tanaka, Shoji

PA Takeda Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A01N043-80

ICS A01N043-653; C08K005-3472; C08K005-46; C08L101-00

CC 5-2 (Agrochemical Bioregulators)

Section cross-reference(s): 42

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 2001247414 | A2 | 20010911 | JP 2000-394071 | 20001226 |
| PRAI | JP 1999-370659 | A | 19991227 | | |

OS MARPAT 135:222833

AB Fungicidal and algicidal compns. with superior effectiveness and superior heat resistance contain isothiazolinones and triazoles. These compns. can be applied to various industrial products. Thus, 2-n-octyl-4-isothiazolin-3-one and tebuconazole were mixed at a 7:3 wt. ratio in Methyl Carbitol to obtain a homogeneous soln. that prevented fungal growth in a coating mold resistant test (JIS Z-2911).

ST isothiazolinone triazole industrial fungicide algicide; coating mold resistance isothiazolinone triazole fungicide

IT Coating materials

(industrial fungicides and algicides contg. isothiazolinones and triazoles for)

IT Algicides

Fungicides

(industrial; contg. isothiazolinones and triazoles)

IT 358973-06-5 358973-07-6 358973-08-7 358973-09-8

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (industrial fungicide and algicide)

IT 288-88-0D, 1H-1,2,4-Triazole, derivs., mixts. with isothiazolinones 1003-07-2D, 4-Isothiazolin-3-one, derivs., mixts. with triazoles 26530-20-1D, 2-n-Octyl-4-isothiazolin-3-one, mixts. with triazoles 60207-31-0D, Azaconazole, mixts. with isothiazolinones 60207-90-1D, Propiconazole, mixts. with isothiazolinones 64359-81-5D, 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one, mixts. with triazoles 94361-06-5D, Cyproconazole, mixts. with isothiazolinones 107534-96-3D, Tebuconazole, mixts. with isothiazolinones

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(industrial fungicides and algicides)

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NEWS 4 Oct 09 Number of Derwent World Patents Index updates increased
NEWS 5 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 6 Oct 22 Over 1 million reactions added to CASREACT
NEWS 7 Oct 22 DGENE GETSIM has been improved
NEWS 8 Oct 29 AAASD no longer available
NEWS 9 Nov 19 New Search Capabilities USPATFULL and USPAT2
NEWS 10 Nov 19 TOXCENTER(SM) - new toxicology file now available on STN
NEWS 11 Nov 29 COPPERLIT now available on STN
NEWS 12 Nov 29 DWPI revisions to NTIS and US Provisional Numbers
NEWS 13 Nov 30 Files VETU and VETB to have open access
NEWS 14 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 15 Dec 10 DGENE BLAST Homology Search
NEWS 16 Dec 17 WELDASEARCH now available on STN
NEWS 17 Dec 17 STANDARDS now available on STN
NEWS 18 Dec 17 New fields for DPCI
NEWS 19 Dec 19 CAS Roles modified
NEWS 20 Dec 19 1907-1946 data and page images added to CA and CPlus
NEWS 21 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 22 Jan 25 Searching with the P indicator for Preparations
NEWS 23 Jan 29 FSTA has been reloaded and moves to weekly updates
NEWS 24 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 25 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 26 Mar 08 Gene Names now available in BIOSIS

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
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NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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| FULL ESTIMATED COST | 0.15 | 0.15 |

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DICTIONARY FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

The P indicator for Preparations was not generated for all of the
CAS Registry Numbers that were added to the H/Z/CA/CAplus files between
12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches
during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved. Also, note that searches
conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files
incorporating CAS Registry Numbers with the P indicator between 12/27/01
and 1/23/02, are encouraged to re-run these strategies. Contact the
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,
worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> s cyproconazole/cn
L1 1 CYPROCONAZOLE/CN

=> s tebuconazole/cn
L2 1 TEBUCONAZOLE/CN

| | | |
|----------------------|------------|---------|
| => file caplus | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 8.32 | 8.47 |

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FILE COVERS 1907 - 14 Mar 2002 VOL 136 ISS 11
FILE LAST UPDATED: 12 Mar 2002 (20020312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/Cplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

=> s 11 and 12 and industrial materials
 273 L1
 653 L2
 194179 INDUSTRIAL
 42 INDUSTRIALS
 194201 INDUSTRIAL
 (INDUSTRIAL OR INDUSTRIALS)
 1411418 MATERIALS
 3 MATERIALSES
 1411419 MATERIALS
 (MATERIALS OR MATERIALSES)
 946 INDUSTRIAL MATERIALS
 (INDUSTRIAL (W) MATERIALS)
L3 0 L1 AND L2 AND INDUSTRIAL MATERIALS

=> s 11 and 12 and leather
 273 L1
 653 L2
 38002 LEATHER
 4643 LEATHERS
 38709 LEATHER
 (LEATHER OR LEATHERS)
L4 2 L1 AND L2 AND LEATHER

=> d 14 1-2 all

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN 1997:440126 CAPLUS
DN 127:46479
TI Water-based, solvent- and emulsifier-free microbicidal compositions.
IN Buschhaus, Hans-Ulrich; Exner, Otto; Kugler, Martin; Nagano, Yukihiro
PA Bayer A.-G., Germany
SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM A01N043-653

ICS A01N043-50; A01N043-40

ICI A01N043-653, A01N043-50, A01N043-40

CC 5-2 (Agrochemical Bioregulators)

Section cross-reference(s): 43, 45

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|----------|
| PI | DE 19543477 | A1 | 19970528 | DE 1995-19543477 | 19951122 |
| | CA 2238033 | AA | 19970529 | CA 1996-2238033 | 19961111 |
| | WO 9718713 | A1 | 19970529 | WO 1996-EP4919 | 19961111 |
| | W: AU, BB, BG, BR, BY, CA, CN, CZ, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9675694 | A1 | 19970611 | AU 1996-75694 | 19961111 |
| | EP 863709 | A1 | 19980916 | EP 1996-938169 | 19961111 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL | | | | |
| | JP 2000500475 | T2 | 20000118 | JP 1997-519342 | 19961111 |
| | BR 9611746 | A | 20000328 | BR 1996-11746 | 19961111 |
| PRAI | DE 1995-19543477 | A | 19951122 | | |
| | WO 1996-EP4919 | W | 19961111 | | |

OS MARPAT 127:46479

AB The title compns. comprise azole fungicide(s) (triadimefon, triadimenol, tebuconazole, hexaconazole, etc.), nitromethylene or related insecticide(s) and quaternary ammonium fungicide(s). The compns. are useful for the preservation of **leather**, wood and tech. materials.

ST microbicidal compn wood **leather** tech

IT Antibacterial agents

Fungicides

(industrial; water-based, solvent- and emulsifier-free microbicidal compns.)

IT Alkylbenzyldimethylammonium chlorides

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(mixts. contg.; microbicidal compn. for preservation of **leather**, wood and tech. materials)

IT Quaternary ammonium compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(mixts. contg.; microbicidal compns. for preservation of **leather**, wood and tech. materials)

IT **Leather**

Wood preservatives

(water-based, solvent- and emulsifier-free microbicidal compns.)

IT 191226-82-1

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(microbicidal compn. for preservation of **leather**, wood and tech. materials)

IT 43121-43-3D, Triadimefon, mixts. contg. 55219-65-3D, Triadimenol, mixts.

contg. 60207-31-0D, Azaconazole, mixts. contg. 60207-90-1D,

Propiconazole, mixts. contg. 67747-09-5D, Prochloraz, mixts. contg.

79983-71-4D, Hexaconazole, mixts. contg. **94361-06-5D**,

Cyproconazole, mixts. contg. 101336-63-4D, mixts. contg.

107534-96-3D, Tebuconazole, mixts. contg. 120983-64-4D, mixts.

contg. 130400-55-4D, mixts. contg. 131748-54-4D, mixts. contg.

131748-55-5D, mixts. contg. 136516-18-2D, mixts. contg. 138261-41-3D,

Imidacloprid, mixts. contg. 160430-64-8D, mixts. contg. 172333-81-2D,
 mixts. contg.
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (microbicial compns. for preservation of **leather**, wood and
 tech. materials)

IT 7173-51-5, Didecyldimethylammonium chloride
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (mixts. contg.; microbicial compn. for preservation of **leather**
 , wood and tech. materials)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:33961 CAPLUS
 DN 126:61838
 TI Phenolic compound microbicides for processing hides and **leather**
 IN Rother, Heinz-Joachim; Kugler, Martin; Rehbein, Hartmut
 PA Bayer A.-G., Germany
 SO Ger. Offen., 3 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A01N031-08
 ICS A01N043-84; A01N043-647; A01N043-52; A01N043-50
 ICI A01N031-08, A01N043-84, A01N043-647, A01N043-52, A01N043-50
 CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 5

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|----------|
| PI | DE 19517840 | A1 | 19961121 | DE 1995-19517840 | 19950516 |
| | CA 2220992 | AA | 19961121 | CA 1996-2220992 | 19960503 |
| | WO 9636739 | A1 | 19961121 | WO 1996-EP1845 | 19960503 |
| | W: AU, BB, BG, BR, BY, CA, CN, CZ, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9656935 | A1 | 19961129 | AU 1996-56935 | 19960503 |
| | AU 704282 | B2 | 19990415 | | |
| | EP 827553 | A1 | 19980311 | EP 1996-915014 | 19960503 |
| | R: AT, BE, DE, ES, GB, IT, NL, SE, PT, FI | | | | |
| | BR 9609081 | A | 19990202 | BR 1996-9081 | 19960503 |
| | ZA 9603849 | A | 19961121 | ZA 1996-3849 | 19960515 |
| | US 5888415 | A | 19990330 | US 1997-952413 | 19971113 |
| | US 6083414 | A | 20000704 | US 1998-213584 | 19981217 |
| PRAI | DE 1995-19517840 | A | 19950516 | | |
| | WO 1996-EP1845 | W | 19960503 | | |
| AB | The microbicial life is extended for phenolic compds. in the title process by addn. of triazoles, benzimidazoles, imidazoles, and(or) morpholine derivs. | | | | |
| ST | phenolic compd microbicide hide leather processing; morpholine deriv stabilizer phenolic microbicide; imidazole deriv stabilizer phenolic microbicide; benzimidazole deriv stabilizer phenolic microbicide; triazole deriv stabilizer phenolic microbicide | | | | |
| IT | Antibacterial agents Hide Leather Stabilizing agents (phenolic compd. microbicides contg. azoles and(or) morpholine derivs. as stabilizers for processing hides and leather) | | | | |
| IT | 59-50-7, p-Chloro-m-cresol 90-43-7, o-Phenylphenol RL: BAC (Biological activity or effector, except adverse); BUU (Biological | | | | |

use, unclassified); BIOL (Biological study); USES (Uses)
 (phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
 as stabilizers for processing hides and leather)

IT 88-04-0 92-69-3, p-Phenylphenol 97-23-4, Dichlorophen 120-32-1,
 2-Benzyl-4-chlorophenol 122-99-6 580-51-8, m-Phenylphenol
 25154-55-6, Nitrophenol 25167-83-3, Tetrachlorophenol 25376-38-9,
 Tribromophenol

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
 as stabilizers for processing hides and leather)

IT 61-82-5, Amitrole 141-91-3D, 2,6-Dimethylmorpholine, C8-16-alkyl derivs.
 148-79-8 1593-77-7, Dodemorph 3878-19-1, Fuberidazole 17804-35-2,
 Benomyl 22916-47-8, Miconazole 23593-75-1, Canesten 27220-47-9,
 Econazole 27523-40-6, Isoconazole 35554-44-0, Imazalil 41083-11-8,
 Azocyclotin 43121-43-3, Triadimefon 55179-31-2, Bitertanol
 55219-65-3, Triadimenol 60207-31-0, Azaconazole 60207-90-1,
 Propiconazole 60628-96-8, Bifonazole 61318-90-9, Sulconazole
 66246-88-6, Penconazole 67564-91-4, Fenpropimorph 67747-09-5,
 Prochloraz 68694-11-1, Triflumizole 76608-88-3, Triapenthenol
 76674-05-0 76674-21-0, Flutriafol 76738-62-0 78613-35-1, Amorolfine
 79983-71-4, Hexaconazole 81412-43-3, Tridemorph 83657-22-1,
 Uniconazole 85509-19-9, Flusilazole 86598-92-7, Imibenconazole
 88671-89-0, Myclobutanil 91315-15-0, Aldimorph **94361-06-5**,
 Cyproconazole 101903-30-4, Pefurazoate 103112-36-3, Fenchlorazole
107534-96-3, Tebuconazole 111566-22-4, Isozophos 112281-77-3,
 Tetraconazole 114369-43-6, Fenethanil 119006-77-8, Flutrimazole
 119446-68-3, Difenoconazole 125116-23-6, Metconazole 129586-32-9
 131983-72-7, Triticonazole 133855-98-8, Epoxiconazole 136426-54-5,
 Fluquinconazole

RL: MOA (Modifier or additive use); USES (Uses)
 (phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
 as stabilizers for processing hides and leather)

=> s 11 and 12 and textiles

273 L1

653 L2

66272 TEXTILES

L5 1 L1 AND L2 AND TEXTILES

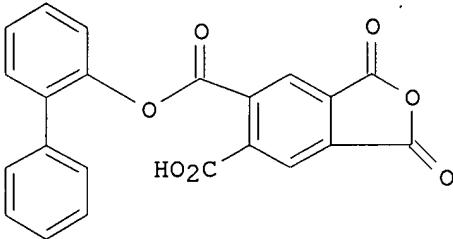
=> d. 15 1 all

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:735421 CAPLUS
 DN 135:257037
 TI Preparation of arylisocyanates and arylanhydrides and derivatives thereof
 as biocidal compounds
 IN Bach, Sylvie; Chaumat, Gilles; Gandini, Alessandro; Seigle Murandi,
 Francoise; Sage, Lucile
 PA Commissariat A L'Energie Atomique, Fr.
 SO Fr. Demande, 40 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 IC ICM A01N043-653
 ICS A01N043-08; A01N025-08; B27K003-38; D21H021-36
 CC 25-18 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 5

| | | | | | |
|-----------|------------|------|-------|-----------------|-------|
| FAN.CNT 1 | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| | ----- | ---- | ----- | ----- | ----- |

PI FR 2802771 A1 20010629
OS CASREACT 135:257037; MARPAT 135:257037
GI

FR 1999-16474 19991224



IV

AB Title compds. OCN-R-NH-CO-X-A (I), Anh-R'-CO-X-A (II) and Ep-R'-CH(OH)-X-A (III) [R, R' = org. fragments; Anh = anhydride; Ep = epoxide; X-A is a residue of a biocidal mol. composed of A-XH] were prep'd. For instance 2-phenylphenol was reacted with 1,2,4,5-Benzenetetracarboxylic acid anhydride (THF, DBTL, DMAP, 65.degree.C, 15 min) to give IV. Examples of I and II had antifungal activity estd. at 0.01 to 1 nM. Substrates such as wood, paper, **textiles**, etc. can be covalently modified by reaction to I, II and III and will exhibit antifungal properties (2 examples, no data).

ST arylisocyanate arylanhydride biocide antifungal insecticide prepn;
triazole biphenyl antifungal prepn

IT Antibacterial agents

Fungicides

Insecticides

Wood preservatives

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 361391-49-3P 361391-50-6P 361391-51-7DP, polymer bound
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 77-58-7 619-60-3, DMAP

RL: CAT (Catalyst use); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 75-09-2, Dichloromethane, uses 109-99-9, Tetrahydrofuran, uses
110-86-1, Pyridine, uses

RL: NUU (Other use, unclassified); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 107534-96-3, Tebuconazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 89-32-7 90-43-7, 2-Hydroxybiphenyl 104-49-4, 1,4-Phenylene
diisocyanate **94361-06-5**, Cyproconazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; prepn. of (hetero)aryl-alkyl-amido-aryl-
isocyanates/anhydrides and derivs. thereof as biocidal compds.)

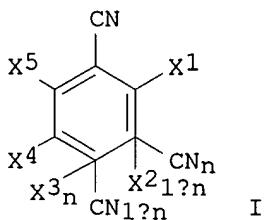
=> s 11 and 12 and paint

273 L1
 653 L2
 45170 PAINT
 35565 PAINTS
 61220 PAINT
 (PAINT OR PAINTS)
 L6 1 L1 AND L2 AND PAINT

=> d 16 1 all

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
 AN 2000:553353 CAPLUS
 DN 133:160845
 TI Use of halogenated benzonitrile and conazole fungicides for preventing of acrylic paint coatings fading
 IN Briendel, Kenneth A.; Firman, Samuel A.
 PA Cognis Corporation, USA
 SO PCT Int. Appl., 18 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A01N043-647
 ICS A01N037-34; C09D005-00
 CC 5-2 (Agrochemical Bioregulators)
 Section cross-reference(s): 41
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2000045636 | A1 | 20000810 | WO 2000-US3137 | 20000208 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1150567 | A1 | 20011107 | EP 2000-907194 | 20000208 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRAI US 1999-119144 | P | 19990208 | | |
| WO 2000-US3137 | W | 20000208 | | |
| OS MARPAT 133:160845 | | | | |
| GI | | | | |



AB A method for preventing the fading of water based acrylic paint coatings consists of incorporation therein of a mixt. of a halogenated benzonitrile fungicide of the formula I (X1, X2, X3, X4, and X5 = H or halogen, with at least one X = halogen, n = 0, 1), and conazole

fungicides.
ST fungicide chlorothalonil tетraconazole mixt **paint** fading
IT Fading
Fungicides
(halogenated benzonitrile and conazole fungicide mixts. for preventing
of acrylic **paints** fading)
IT Paints
(water-thinned; halogenated benzonitrile and conazole fungicide mixts.
for preventing of acrylic **paints** fading)
IT 1897-45-6D, Chlorothalonil, mixt. with conazole compds. 66246-88-6D,
Penconazole, mixt. with halogenated benzonitrile compds. 76674-21-0D,
Flutriafol, mixt. with halogenated benzonitrile compds. 79983-71-4D,
Hexaconazole, mixt. with halogenated benzonitrile compds.
94361-06-5D, Cyproconazole, mixt. with halogenated benzonitrile
compds. **107534-96-3D**, Tebuconazole, mixt. with halogenated
benzonitrile compds. 112281-77-3D, Tetraconazole, mixt. with halogenated
benzonitrile compds. 146218-59-9, Tetraconazole-Chlorothalonil mixt.
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(halogenated benzonitrile and conazole fungicide mixts. for preventing
of acrylic **paints** fading)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Culbreath; US 1400 A 1995 CAPLUS
(2) Kataria; Crop Prot 1990, V9(6), P403 CAPLUS
(3) Laidler; Brighton Crop Prot Conf --Pests Dis 1990, 2, P819 CAPLUS
(4) Liu; Polym Prepr 1997, V38(2), P624 CAPLUS
(5) Smith; US 5834006 A 1998 CAPLUS
(6) Tadros; US 5139773 A 1992 CAPLUS

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| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.15 | 0.15 |

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DICTIONARY FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

The P indicator for Preparations was not generated for all of the
CAS Registry Numbers that were added to the H/Z/CA/CAplus files between
12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches
during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved. Also, note that searches
conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files
incorporating CAS Registry Numbers with the P indicator between 12/27/01
and 1/23/02, are encouraged to re-run these strategies. Contact the
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,
worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> s cyproconazole/cn
L1 1 CYPROCONAZOLE/CN

=> s tebuconazole/cn
L2 1 TEBUCONAZOLE/CN

| | | |
|----------------------|------------|---------|
| => file caplus | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 8.32 | 8.47 |

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FILE COVERS 1907 - 14 Mar 2002 VOL 136 ISS 11
FILE LAST UPDATED: 12 Mar 2002 (20020312/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/Cplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

```
=> s 11 and 12 and industrial materials
      273 L1
      653 L2
      194179 INDUSTRIAL
      42 INDUSTRIALS
      194201 INDUSTRIAL
          (INDUSTRIAL OR INDUSTRIALS)
      1411418 MATERIALS
          3 MATERIALSES
      1411419 MATERIALS
          (MATERIALS OR MATERIALSES)
      946 INDUSTRIAL MATERIALS
          (INDUSTRIAL (W) MATERIALS)
L3          0 L1 AND L2 AND INDUSTRIAL MATERIALS
```

```
=> s 11 and 12 and leather
      273 L1
      653 L2
      38002 LEATHER
      4643 LEATHERS
      38709 LEATHER
          (LEATHER OR LEATHERS)
L4          2 L1 AND L2 AND LEATHER
```

=> d 14 1-2 all

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN 1997:440126 CAPLUS
DN 127:46479
TI Water-based, solvent- and emulsifier-free microbicidal compositions.
IN Buschhaus, Hans-Ulrich; Exner, Otto; Kugler, Martin; Nagano, Yukihiro
PA Bayer A.-G., Germany
SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM A01N043-653
ICS A01N043-50; A01N043-40

ICI A01N043-653, A01N043-50, A01N043-40

CC 5-2 (Agrochemical Bioregulators)
Section cross-reference(s): 43, 45

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|----------|
| PI | DE 19543477 | A1 | 19970528 | DE 1995-19543477 | 19951122 |
| | CA 2238033 | AA | 19970529 | CA 1996-2238033 | 19961111 |
| | WO 9718713 | A1 | 19970529 | WO 1996-EP4919 | 19961111 |
| | W: AU, BB, BG, BR, BY, CA, CN, CZ, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9675694 | A1 | 19970611 | AU 1996-75694 | 19961111 |
| | EP 863709 | A1 | 19980916 | EP 1996-938169 | 19961111 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL | | | | |
| | JP 2000500475 | T2 | 20000118 | JP 1997-519342 | 19961111 |
| | BR 9611746 | A | 20000328 | BR 1996-11746 | 19961111 |
| PRAI | DE 1995-19543477 | A | 19951122 | | |
| | WO 1996-EP4919 | W | 19961111 | | |
| OS | MARPAT 127:46479 | | | | |
| AB | The title compns. comprise azole fungicide(s) (triadimefon, triadimenol, tebuconazole, hexaconazole, etc.), nitromethylene or related insecticide(s) and quaternary ammonium fungicide(s). The compns. are useful for the preservation of leather , wood and tech. materials. | | | | |
| ST | microbicidal compn wood leather tech | | | | |
| IT | Antibacterial agents Fungicides (industrial; water-based, solvent- and emulsifier-free microbicidal compns.) | | | | |
| IT | Alkylbenzyldimethylammonium chlorides RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (mixts. contg.; microbicidal compn. for preservation of leather , wood and tech. materials) | | | | |
| IT | Quaternary ammonium compounds, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (mixts. contg.; microbicidal compns. for preservation of leather , wood and tech. materials) | | | | |
| IT | Leather Wood preservatives (water-based, solvent- and emulsifier-free microbicidal compns.) | | | | |
| IT | 191226-82-1 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (microbicidal compn. for preservation of leather , wood and tech. materials) | | | | |
| IT | 43121-43-3D, Triadimefon, mixts. contg. 55219-65-3D, Triadimenol, mixts. contg. 60207-31-0D, Azaconazole, mixts. contg. 60207-90-1D, Propiconazole, mixts. contg. 67747-09-5D, Prochloraz, mixts. contg. 79983-71-4D, Hexaconazole, mixts. contg. 94361-06-5D , Cyproconazole, mixts. contg. 101336-63-4D, mixts. contg. 107534-96-3D , Tebuconazole, mixts. contg. 120983-64-4D, mixts. contg. 130400-55-4D, mixts. contg. 131748-54-4D, mixts. contg. 131748-55-5D, mixts. contg. 136516-18-2D, mixts. contg. 138261-41-3D, | | | | |

Imidacloprid, mixts. contg. 160430-64-8D, mixts. contg. 172333-81-2D,
 mixts. contg.
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (microbicial compns. for preservation of **leather**, wood and
 tech. materials)

IT 7173-51-5, Didecyldimethylammonium chloride
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (mixts. contg.; microbicial compn. for preservation of **leather**
 , wood and tech. materials)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:33961 CAPLUS
 DN 126:61838
 TI Phenolic compound microbicides for processing hides and **leather**
 IN Rother, Heinz-Joachim; Kugler, Martin; Rehbein, Hartmut
 PA Bayer A.-G., Germany
 SO Ger. Offen., 3 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A01N031-08
 ICS A01N043-84; A01N043-647; A01N043-52; A01N043-50
 ICI A01N031-08, A01N043-84, A01N043-647, A01N043-52, A01N043-50
 CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 5

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|---|------------------|----------|
| PI | DE 19517840 | A1 | 19961121 | DE 1995-19517840 | 19950516 |
| | CA 2220992 | AA | 19961121 | CA 1996-2220992 | 19960503 |
| | WO 9636739 | A1 | 19961121 | WO 1996-EP1845 | 19960503 |
| | | W: | AU, BB, BG, BR, BY, CA, CN, CZ, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US | | |
| | | RW: | AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | |
| | AU 9656935 | A1 | 19961129 | AU 1996-56935 | 19960503 |
| | AU 704282 | B2 | 19990415 | | |
| | EP 827553 | A1 | 19980311 | EP 1996-915014 | 19960503 |
| | | R: | AT, BE, DE, ES, GB, IT, NL, SE, PT, FI | | |
| | BR 9609081 | A | 19990202 | BR 1996-9081 | 19960503 |
| | ZA 9603849 | A | 19961121 | ZA 1996-3849 | 19960515 |
| | US 5888415 | A | 19990330 | US 1997-952413 | 19971113 |
| | US 6083414 | A | 20000704 | US 1998-213584 | 19981217 |
| PRAI | DE 1995-19517840 | A | 19950516 | | |
| | WO 1996-EP1845 | W | 19960503 | | |
| AB | The microbicial life is extended for phenolic compds. in the title process by addn. of triazoles, benzimidazoles, imidazoles, and(or) morpholine derivs. | | | | |
| ST | phenolic compd microbicide hide leather processing; morpholine deriv stabilizer phenolic microbicide; imidazole deriv stabilizer phenolic microbicide; benzimidazole deriv stabilizer phenolic microbicide; triazole deriv stabilizer phenolic microbicide | | | | |
| IT | Antibacterial agents Hide Leather Stabilizing agents (phenolic compd. microbicides contg. azoles and(or) morpholine derivs. as stabilizers for processing hides and leather) | | | | |
| IT | 59-50-7, p-Chloro-m-cresol 90-43-7, o-Phenylphenol RL: BAC (Biological activity or effector, except adverse); BUU (Biological | | | | |

use, unclassified); BIOL (Biological study); USES (Uses)
 (phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
 as stabilizers for processing hides and leather)

IT 88-04-0 92-69-3, p-Phenylphenol 97-23-4, Dichlorophen 120-32-1,
 2-Benzyl-4-chlorophenol 122-99-6 580-51-8, m-Phenylphenol
 25154-55-6, Nitrophenol 25167-83-3, Tetrachlorophenol 25376-38-9,
 Tribromophenol

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
 as stabilizers for processing hides and leather)

IT 61-82-5, Amitrole 141-91-3D, 2,6-Dimethylmorpholine, C8-16-alkyl derivs.
 148-79-8 1593-77-7, Dodemorph 3878-19-1, Fuberidazole 17804-35-2,
 Benomyl 22916-47-8, Miconazole 23593-75-1, Canesten 27220-47-9,
 Econazole 27523-40-6, Isoconazole 35554-44-0, Imazalil 41083-11-8,
 Azocyclotin 43121-43-3, Triadimefon 55179-31-2, Bitertanol
 55219-65-3, Triadimenol 60207-31-0, Azaconazole 60207-90-1,
 Propiconazole 60628-96-8, Bifonazole 61318-90-9, Sulconazole
 66246-88-6, Penconazole 67564-91-4, Fenpropimorph 67747-09-5,
 Prochloraz 68694-11-1, Triflumizole 76608-88-3, Triapenthenol
 76674-05-0 76674-21-0, Flutriafol 76738-62-0 78613-35-1, Amorolfine
 79983-71-4, Hexaconazole 81412-43-3, Tridemorph 83657-22-1,
 Uniconazole 85509-19-9, Flusilazole 86598-92-7, Imibenconazole
 88671-89-0, Myclobutanil 91315-15-0, Aldimorph **94361-06-5**,
 Cyproconazole 101903-30-4, Pefurazoate 103112-36-3, Fenchlorazole
107534-96-3, Tebuconazole 111566-22-4, Isozophos 112281-77-3,
 Tetraconazole 114369-43-6, Fenethanil 119006-77-8, Flutrimazole
 119446-68-3, Difenoconazole 125116-23-6, Metconazole 129586-32-9
 131983-72-7, Triticonazole 133855-98-8, Epoxiconazole 136426-54-5,
 Fluquinconazole

RL: MOA (Modifier or additive use); USES (Uses)
 (phenolic compd. microbicides contg. azoles and(or) morpholine derivs.
 as stabilizers for processing hides and leather)

=> s 11 and 12 and textiles

273 L1

653 L2

66272 TEXTILES

L5 1 L1 AND L2 AND TEXTILES

=> d 15 1 all

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:735421 CAPLUS
 DN 135:257037
 TI Preparation of arylisocyanates and arylanhydrides and derivatives thereof
 as biocidal compounds
 IN Bach, Sylvie; Chaumat, Gilles; Gandini, Alessandro; Seigle Murandi,
 Francoise; Sage, Lucile
 PA Commissariat A L'Energie Atomique, Fr.
 SO Fr. Demande, 40 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 IC ICM A01N043-653
 ICS A01N043-08; A01N025-08; B27K003-38; D21H021-36
 CC 25-18 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 5

FAN.CNT 1

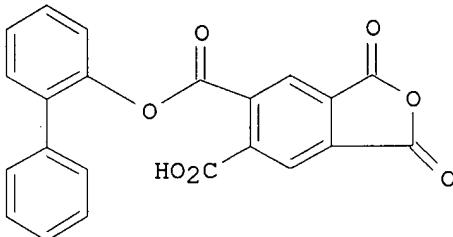
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|-------|-----------------|-------|
| ----- | ----- | ----- | ----- | ----- |

PI FR 2802771
OS CASREACT 135:257037; MARPAT 135:257037
GI

A1 20010629

FR 1999-16474

19991224



IV

AB Title compds. OCN-R-NH-CO-X-A (I), Anh-R'-CO-X-A (II) and Ep-R'-CH(OH)-X-A (III) [R, R' = org. fragments; Anh = anhydride; Ep = epoxide; X-A is a residue of a biocidal mol. composed of A-XH] were prepd. For instance 2-phenylphenol was reacted with 1,2,4,5-Benzenetetracarboxylic acid anhydride (THF, DBTL, DMAP, 65.degree.C, 15 min) to give IV. Examples of I and II had antifungal activity estd. at 0.01 to 1 nM. Substrates such as wood, paper, **textiles**, etc. can be covalently modified by reaction to I, II and III and will exhibit antifungal properties (2 examples, no data).

ST arylisocyanate arylanhydride biocide antifungal insecticide prepn;
triazole biphenyl antifungal prepn

IT Antibacterial agents

Fungicides

Insecticides

Wood preservatives

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 361391-49-3P 361391-50-6P 361391-51-7DP, polymer bound

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 77-58-7 619-60-3, DMAP

RL: CAT (Catalyst use); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 75-09-2, Dichloromethane, uses 109-99-9, Tetrahydrofuran, uses
110-86-1, Pyridine, uses

RL: NUU (Other use, unclassified); USES (Uses)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 107534-96-3, Tebuconazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of (hetero)aryl-alkyl-amido-aryl-isocyanates/anhydrides and
derivs. thereof as biocidal compds.)

IT 89-32-7 90-43-7, 2-Hydroxybiphenyl 104-49-4, 1,4-Phenylene
diisocyanate 94361-06-5, Cyproconazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; prepn. of (hetero)aryl-alkyl-amido-aryl-
isocyanates/anhydrides and derivs. thereof as biocidal compds.)

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NEWS 3 Oct 09 Korean abstracts now included in Derwent World Patents Index
NEWS 4 Oct 09 Number of Derwent World Patents Index updates increased
NEWS 5 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 6 Oct 22 Over 1 million reactions added to CASREACT
NEWS 7 Oct 22 DGENE GETSIM has been improved
NEWS 8 Oct 29 AAASD no longer available
NEWS 9 Nov 19 New Search Capabilities USPATFULL and USPAT2
NEWS 10 Nov 19 TOXCENTER(SM) - new toxicology file now available on STN
NEWS 11 Nov 29 COPPERLIT now available on STN
NEWS 12 Nov 29 DWPI revisions to NTIS and US Provisional Numbers
NEWS 13 Nov 30 Files VETU and VETB to have open access
NEWS 14 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 15 Dec 10 DGENE BLAST Homology Search
NEWS 16 Dec 17 WELDASEARCH now available on STN
NEWS 17 Dec 17 STANDARDS now available on STN
NEWS 18 Dec 17 New fields for DPCI
NEWS 19 Dec 19 CAS Roles modified
NEWS 20 Dec 19 1907-1946 data and page images added to CA and CAplus
NEWS 21 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 22 Jan 25 Searching with the P indicator for Preparations
NEWS 23 Jan 29 FSTA has been reloaded and moves to weekly updates
NEWS 24 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 25 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 26 Mar 08 Gene Names now available in BIOSIS

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002

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| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.15 | 0.15 |

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DICTIONARY FILE UPDATES: 12 MAR 2002 HIGHEST RN 400707-37-1

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

The P indicator for Preparations was not generated for all of the
CAS Registry Numbers that were added to the H/Z/CA/CAplus files between
12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches
during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved. Also, note that searches
conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files
incorporating CAS Registry Numbers with the P indicator between 12/27/01
and 1/23/02, are encouraged to re-run these strategies. Contact the
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,
worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> s opus/cn
L1 1 OPUS/CN

=> d 11 all

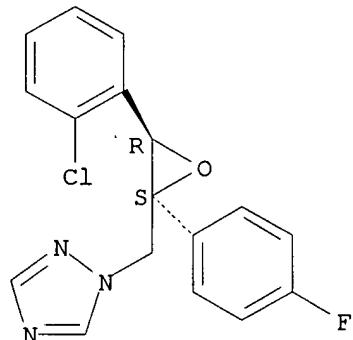
L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 133855-98-8 REGISTRY
CN 1H-1,2,4-Triazole, 1-[(2R,3S)-3-(2-chlorophenyl)-2-(4-
fluorophenyl)oxiranyl]methyl]-, rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-1,2,4-Triazole, 1-[(3-(2-chlorophenyl)-2-(4-
fluorophenyl)oxiranyl)methyl]-, cis-(.+-.)-
OTHER NAMES:
CN BAS 480F
CN Epoxiconazole
CN Opus

FS STEREOSEARCH
 DR 106325-08-0, 205862-63-1
 MF C17 H13 Cl F N3 O
 CI COM
 SR CA
 LC STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CBNB,
 CHEMCATS, CHEMLIST, CIN, CSCHEM, MEDLINE, MRCK*, PROMT, SPECINFO,
 TOXCENTER, ULIDAT, USPATFULL
 (*File contains numerically searchable property data)

Ring System Data

| Elemental Analysis | Elemental Sequence | Size of the Rings | Size of the Ring System | Ring Formula | Identifier | Occurrence | Ring ID | Count |
|--------------------|--------------------|-------------------|-------------------------|--------------|------------|------------|---------|-------|
| EA | ES | SZ | RF | | RID | | | |
| C2O | OC2 | 3 | C2O | | 1.30.1 | 1 | | |
| C2N3 | N2CNC | 5 | C2N3 | | 16.515.13 | 1 | | |
| C6 | C6 | 6 | C6 | | 46.150.18 | 2 | | |

Relative stereochemistry.



Calculated Properties (CALC)

| CODE | PROPERTY | VALUE | CONDITION | NOTE |
|---------|------------------|------------------|------------|---------|
| HD | H donors | 0 | | ACD (1) |
| HAC | H acceptors | 4 | | ACD (1) |
| MW | Molecular Weight | 329.76 | | ACD (1) |
| LOGP | logP | 2.873+/-0.650 | | ACD (1) |
| LOGD | logD | -0.77 | pH 1 | ACD (1) |
| LOGD | logD | 1.93 | pH 4 | ACD (1) |
| LOGD | logD | 2.87 | pH 7 | ACD (1) |
| LOGD | logD | 2.87 | pH 8 | ACD (1) |
| LOGD | logD | 2.87 | pH 10 | ACD (1) |
| PKA | pKa | 4.89+/-0.41 | Most Basic | ACD (1) |
| SLB.MOL | Molar Solubility | >=0.1 - <1 mol/L | pH 1 | ACD (1) |
| SLB.MOL | Molar Solubility | <0.01 mol/L | pH 4 | ACD (1) |
| SLB.MOL | Molar Solubility | <0.01 mol/L | pH 7 | ACD (1) |
| SLB.MOL | Molar Solubility | <0.01 mol/L | pH 8 | ACD (1) |
| SLB.MOL | Molar Solubility | <0.01 mol/L | pH 10 | ACD (1) |

(1) Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.67 ((C) 1994-2002 ACD)

139 REFERENCES IN FILE CA (1967 TO DATE)
35 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
140 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 136:49551 CA
TI Impact of fungicides on active oxygen species and antioxidant enzymes in spring barley (*Hordeum vulgare L.*) exposed to ozone
AU Wu, Yue-xuan; von Tiedemann, Andreas
CS Faculty of Agriculture, Department of Phytomedicine, University of Rostock, Rostock, 18051, Germany
SO Environmental Pollution (Oxford, United Kingdom) (2001), Volume Date 2002, 116(1), 37-47
CODEN: ENPOEK; ISSN: 0269-7491
PB Elsevier Science Ltd.
DT Journal
LA English
CC 4-4 (Toxicology)
Section cross-reference(s): 11, 17, 59
AB Modern fungicides widely used in cereal prodn. have antioxidant effects and may reduce the impact of ozone on grain prodn. Two modern fungicides, a strobilurin, azoxystrobin (AZO), and a triazole, Epoxiconazole (EPO), applied as foliar spray on spring barley (*Hordeum vulgare L.* cv. Scarlett) 3 days prior to fumigation with injurious doses of ozone (150-250 ppb; 5 days; 7 h/day) induced a 50-60% protection against ozone injury on leaves. Fungicide treatments of barley plants at growth stage (GS) 32 significantly increased the total leaf sol. protein content. Addnl., activities of the antioxidative enzymes superoxide dismutase (SOD), catalase (CAT), ascorbate-peroxidase (APX), and glutathione reductase (GR) were increased by both fungicides at maximal rates of 16, 75, 51, and 144%, resp. Guiacol-peroxidase (POX) activity was elevated by 50-110% only in AZO-treated plants while this effect was lacking after treatments with EPO. This coincided with elevated levels of H₂O₂ only in EPO- and not in AZO-treated plants. The enhancement of the plant antioxidative system by the 2 fungicides significantly and considerably reduced the level of superoxide (O₂⁻) in leaves. Fumigation of barley plants for 4 days with non-injurious ozone doses (120-150 ppb, 7 h/day) markedly and immediately stimulated O₂⁻ accumulation in leaves while H₂O₂ was increased only after the third day of fumigation. Therefore, O₂⁻ itself or as a precursor of even more toxic oxyradicals appears to be more indicative for ozone-induced leaf damage than H₂O₂. Ozone also induced significant increases in the activity of antioxidant enzymes (SOD, POX, and CAT) after 2 days of fumigation in fungicide-untreated plants while after 4 days of fumigation these enzymes declined to a level lower than in unfumigated plants, due to the oxidative degrdn. of leaf proteins. This is the first report demonstrating the marked enhancement of plant antioxidative enzymes and the enhanced scavenging of potentially harmful O₂⁻ by fungicides as a mechanism of protecting plants against noxious oxidative stress from the environment. The antioxidant effect of modern fungicides widely used in intense cereal prodn. in many countries represents an important factor when evaluating potential air pollution effects in agriculture.
ST fungicide antioxidant enzyme *Hordeum* ozone; spring barley oxidative stress ozone azoxystrobin Epoxiconazole
IT Enzymes, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antioxidant; impact of fungicides on active oxygen species and antioxidant enzymes in spring barley exposed to ozone)
IT Air pollution
Barley
Cereal (grain)

Fungicides
 Growth and development, plant
 Oxidative stress, biological
 Senescence, plant
 (impact of fungicides on active oxygen species and antioxidant enzymes
 in spring barley exposed to ozone)
 IT Reactive oxygen species
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (impact of fungicides on active oxygen species and antioxidant enzymes
 in spring barley exposed to ozone)
 IT Proteins,
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (sol.; impact of fungicides on active oxygen species and antioxidant
 enzymes in spring barley exposed to ozone)
 IT 10028-15-6, Ozone, biological studies
 RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL
 (Biological study); OCCU (Occurrence)
 (impact of fungicides on active oxygen species and antioxidant enzymes
 in spring barley exposed to ozone)
 IT 7722-84-1, Hydrogen peroxide, biological studies 9001-05-2, Catalase
 9001-48-3, Glutathione reductase 9003-99-0, Peroxidase 9054-89-1,
 Superoxide dismutase 11062-77-4, Superoxide 72906-87-7, Ascorbate
 peroxidase 131860-33-8, Azoxystrobin 133855-98-8, Epoxiconazole
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (impact of fungicides on active oxygen species and antioxidant enzymes
 in spring barley exposed to ozone)

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REFERENCE 2

- AN 136:33242 CA
TI Chemical control of rust in fig seedlings (*Ficus carica*)
AU Marchi, Carlos E.; de Resende, Mario L. V.; Chalfun, Nilton N. J.
CS Departamento de Fitopatologia, UFLA, Lavras, Brazil
SO Summa Phytopathologica (2001), 27(2), 240-245
CODEN: SUPHDV; ISSN: 0100-5405
PB Grupo Paulista de Fitopatologia
DT Journal
LA Portuguese
CC 5-2 (Agrochemical Bioregulators)
AB The fig rust is a disease broadly spread, causing accentuated defoliation and under development of seedlings in nurseries. The present work was accomplished with seedlings of fig cv. Roxo-de-Valinhos in the orchard of UFLA/Lavras-MG, having as objective to verify the efficiency of some protective and systemic fungicides, analyzing and correlating the progress of disease with the climatic data. The exptl. design was randomized entirely with 6 treatments and 16 repetitions. The treatments were (doses a.i./1001 H₂O, biweekly applications): 1 - control; 2 - mancozeb 800 PM (160 g); 3 - cuprous oxide 500 PM (120 g); 4 - tebuconazole 200 CE (15 g); 5 - copper oxychloride 500 PM (100 g); and 6 - epoxyconazole 125 SC (50 g). Every fifteen days, evaluations of disease incidence and severity, and in the final of the expt. the percentage of remaining leaves/treatment were quantified. The first symptoms of rust appeared in early Nov. of 1998, and the disease was pos. correlated with the temp., but not with the rainfall and relative humidity. The fungicide mancozeb was the most effective in redn. of disease incidence, followed by the cuprous oxide. Smaller severity was also obtained with the mancozeb application, and soon after with the cupric. Regarding the percentage of remaining leaves, the fungicides did not differ significantly, but did differ from the control.
ST fungicide Phakopsora rust fig seedling

IT Fig (Ficus carica)
Fungicides
Phakopsora nishidana
Seedling
(chem. control of rust in fig seedlings)

IT 1317-39-1, Cuprous oxide, biological studies 1332-40-7, Copper oxychloride 8018-01-7, Mancozeb 107534-96-3, Tebuconazole 133855-98-8
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(chem. control of rust in fig seedlings)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

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REFERENCE 3

AN 136:18051 CA
TI Factors affecting diseases of winter wheat in England and Wales, 1989-98
AU Hardwick, N. V.; Jones, D. R.; Slough, J. E.
CS Central Science Laboratory, York, YO41 1LZ, UK
SO Plant Pathology (2001), 50(4), 453-462
CODEN: PLPAAD; ISSN: 0032-0862
PB Blackwell Science Ltd.
DT Journal
LA English
CC 11-5 (Plant Biochemistry)
AB Samples from 360 to 450 randomly selected winter wheat crops in England and Wales were collected annually during the milky ripe development stages (GS 73-75) from 1989 to 1998. The no. of samples from each region was proportional to the area of winter wheat grown. The percentage area affected by disease was assessed on the top two leaves and the ear, and the incidence and severity of stem base diseases were also recorded. An est. of the percentage area of the crop affected by barley yellow dwarf virus (BYDV) and take-all (*Gaeumannomyces graminis*) was made in the field. *Septoria* leaf blotch (*Septoria tritici*, teleomorph *Mycosphaerella graminicola*) was the major foliar disease recorded, with an av. max. severity of 7. cndot. 8% of the area of leaf 2 affected in 1998. Eyespot (*Tapesia* spp.) was the major stem base disease, with the highest incidence of stems falling into the damaging moderate plus severe categories (18. cndot. 9%) in 1998. Levels of powdery mildew (*Blumeria graminis*) showed a decline from 0. cndot. 4% of the area of leaf 2 in 1989 to 0. cndot. 1% in 1998. This fall was assoccd. with a redn. in the proportion of disease-susceptible cultivars grown. There were significant regional differences in levels of *Septoria* leaf blotch, brown rust (*Puccinia recondita*), eyespot, sharp eyespot (*Rhizoctonia cerealis*) and BYDV. The percentage of crops treated with a fungicide rose from 96% in 1989 to 98% in 1998 and the mean no. of spray applications per crop rose during this period from 2. cndot. 1 to 2. cndot. 5. A higher proportion of crops was treated with fungicides between the end of tillering and fifth node detectable (GS 24-35) than around flag leaf emergence (GS 36-48) or ear emergence (GS 49-71). Prior to 1994, the majority of late fungicide sprays was applied at, or after, ear emergence, but from 1994, the majority was applied around flag leaf emergence. The value and

socioeconomic implications of the results are discussed.

ST wheat disease England Wales fungicide

IT Winter wheat
(disease; causes and factors affecting diseases of winter wheat in England and Wales)

IT Fungicides
(fungicides for control of winter wheat diseases in England and Wales)

IT Puccinia recondita
(winter wheat brown rust diseases in England and Wales caused by)

IT Barley yellow dwarf virus
Mycosphaerella graminicola
(winter wheat diseases in England and Wales caused by)

IT Tapesia
(winter wheat eyespot diseases in England and Wales caused by)

IT Septoria tritici
(winter wheat leaf-blotch diseases in England and Wales caused by)

IT Blumeria graminis
(winter wheat powdery mildew diseases in England and Wales caused by)

IT Ceratobasidium cereale
(winter wheat sharp eyespot diseases in England and Wales caused by)

IT Gaeumannomyces graminis
(winter wheat take-all diseases in England and Wales caused by)

IT 110-91-8, Morpholine, biological studies 10605-21-7, Carbendazim
17804-35-2, Benomyl 43121-43-3, Triadimefon 55219-65-3, Triadimenol
60207-90-1, Propiconazole 67306-00-7, Fenpropidin 67564-91-4,
Fenpropimorph 67747-09-5, Prochloraz 76674-21-0, Flutriafol 81412-43
-3, Tridemorph 85509-19-9, Flusilazole 94361-06-5, Cyproconazole
107534-96-3, Tebuconazole 114369-43-6, Fenbuconazole 116255-48-2,
Bromuconazole 119446-68-3, Difenoconazole 131860-33-8, Azoxystrobin
133855-98-8, Epoxiconazole 143390-89-0, Kresoxim-methyl
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(fungicides for control of winter wheat diseases in England and Wales)

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REFERENCE 4

AN 136:16727 CA
 TI Aqueous pesticide dispersions
 IN Strom, Robert M.; Price, D. Claude; Lubetkin, Steven D.
 PA USA
 SO U.S. Pat. Appl. Publ., 5 pp., Cont.-in-part of U.S. Ser. No. 546,270,
 abandoned.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM A01N025-00
 NCL 424405000
 CC 5-4 (Agrochemical Bioregulators)
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------------|-----------------|----------|
| PI | US 2001051175 | A1 | 20011213 | US 2001-865360 | 20010525 |
| PRAI | US 1999-128994 | | 19990412 | | |
| | | | US 2000-546270 | 20000410 | |

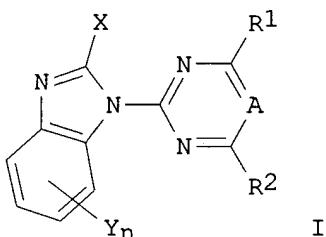
AB The bioavailability of a pesticide can be increased by formulating the pesticide as a stable aq. dispersion of particles in the micron or submicron range. The formulation is prep'd. by blending a pesticide with a surfactant and water, followed by grinding. Such a formulation has the further advantage of reducing or eliminating the need for org. solvents. The stable aq. dispersion provides a means of prep'g. a one part formulation of a plurality of pesticides which would be otherwise unstable in each other's presence.

ST pesticide dispersion aq
 IT Pesticide formulations
 (aq. pesticide dispersions)
 IT 1912-24-9, Atrazine 133855-98-8 168316-95-8, Spinosad 264257-62-7
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (aq. dispersion of)

REFERENCE 5

AN 135:368000 CA
 TI Synergistic agrochemical microbicide compositions containing
 pyrimidinylbenzimidazoles or triazinylbenzimidazoles
 IN Miyake, Hiroshi; Sakai, Mitsuyoshi; Nagayama, Kouzo
 PA Kumiai Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM A01N043-52
 ICS A01N035-10; A01N043-653; A01N043-66
 CC 5-2 (Agrochemical Bioregulators)
 Section cross-reference(s): 28
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | JP 2001322903 | A2 | 20011120 | JP 2000-141896 | 20000515 |
| GI | | | | | |



AB Agrochem. microbicide compns. contain pyrimidinylbenzimidazoles or
 triazinylbenzimidazoles I (A = N, CR₃; R₁, R₂ = H, halo, alkyl, alkenyl,
 alkynyl, etc.; X = H, halo, NO₂, cyano, alkyl, alkenyl, alkynyl, etc.; Y =
 halo, NO₂, cyano, alkyl, alkenyl, alkynyl, etc.; n = 0-3) and
 methoxyacrylates, triazoles, imidazoles, piperazines, morpholines,
 hydroxypyrimidines, benzimidazoles, dicarboximides, triazines,
 phthalonitriles, dithiocarbamates, phenylpyrroles, anilinopyrimidines,
 guanidines, carboxamides, quinoxalines, acibenzolar-S-Me, quinoxifen,
 famoxadone, spiroxamine, triazoxide, S, Cu oxychloride, and/or pyrazophos.
 Concomitant application of I (X = Me, Y_n = 5-Cl, A = N, R₁ = R₂ = OMe) and
 azoxystrobin at 0.003 and 1 ppm, resp., showed 78% control of Erysiphe
 graminis in wheat.
 ST synergism agrochem fungicide pyrimidinylbenzimidazole
 triazinylbenzimidazole; benzimidazole pyrimidinyl triazinyl agrochem
 fungicide synergism; wheat Erysiphe control fungicide
 pyrimidinylbenzimidazole triazinylbenzimidazole; powdery mildew control
 wheat fungicide pyrimidinylbenzimidazole
 IT Wheat
 (powdery mildew; synergistic agrochem. microbicides contg.
 pyrimidinylbenzimidazoles or triazinylbenzimidazoles for control of)
 IT Erysiphe graminis
 (synergistic agrochem. microbicides contg. pyrimidinylbenzimidazoles or
 triazinylbenzimidazoles for control of)
 IT Fungicides
 (synergistic, agrochem.; synergistic agrochem. microbicides contg.
 pyrimidinylbenzimidazoles or triazinylbenzimidazoles)
 IT 51-17-2, Benzimidazole 22536-63-6, 2-Chloro-4-methoxypyrimidine
 40501-16-4
 RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; synergistic agrochem. microbicides contg.
 pyrimidinylbenzimidazoles or triazinylbenzimidazoles)

IT 1332-40-7D, Copper oxychloride, mixts. contg. 7704-34-9D, Sulfur, mixts.
 contg., biological studies 10605-21-7D, Carbendazim, mixts. with
 pyrimidinylbenzimidazoles or triazinylbenzimidazoles 13457-18-6D,
 Pyrazophos, mixts. contg. 72459-58-6D, Triazoxide, mixts. contg.
 118134-30-8D, Spiroxamine, mixts. contg. 124495-18-7D, Quinoxifen,
 mixts. contg. 131807-57-3D, Famoxadone, mixts. contg. 133855-98-8D,
 mixts. with pyrimidinylbenzimidazoles or triazinylbenzimidazoles
 135158-54-2D, Acibenzolar-S-methyl, mixts. contg. 143390-89-0D,
 Kresoxim-methyl, mixts. with pyrimidinylbenzimidazoles or
 triazinylbenzimidazoles 374618-04-9 374618-05-0 374618-06-1
 374618-07-2 374618-08-3 374618-09-4 374618-10-7 374618-11-8
 374618-12-9 374618-13-0 374618-14-1 374618-15-2 374618-16-3
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 374618-91-4 374618-92-5 374618-93-6 374618-94-7 374618-95-8
 374618-96-9 374618-97-0 374618-98-1 374618-99-2 374619-00-8
 374619-01-9 374619-02-0 374619-03-1 374619-04-2 374619-06-4
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 374619-17-7 374619-18-8 374619-19-9 374619-20-2 374619-21-3
 374619-22-4 374619-23-5 374619-24-6 374619-25-7 374619-26-8
 374619-27-9 374619-28-0 374619-29-1 374619-30-4 374619-31-5
 374619-32-6 374619-33-7 374619-34-8 374619-35-9 374619-36-0
 374619-37-1 374619-38-2 374619-39-3 374619-40-6 374619-41-7
 374619-42-8 374619-43-9 374619-44-0 374619-45-1 374619-46-2
 374619-47-3 374619-48-4 374619-49-5 374619-50-8 374619-51-9
 374619-52-0 374619-53-1 374619-54-2 374619-55-3 374619-56-4
 374619-58-6 374619-59-7 374619-60-0 374619-61-1 374619-62-2
 374619-63-3 374619-64-4 374619-65-5 374619-66-6 374619-67-7
 374619-68-8 374619-69-9 374619-70-2 374619-71-3 374619-72-4
 374619-73-5 374619-74-6 374619-75-7 374619-76-8 374619-77-9
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 374621-75-7 374621-76-8 374621-77-9 374621-78-0 374621-79-1
 374621-80-4 374621-81-5 374621-82-6 374621-83-7

RL: AGR (Agricultural use); BAC (Biological activity or effector, except
 adverse); BIOL (Biological study); USES (Uses)
 (synergistic agrochem. microbicides contg. pyrimidinylbenzimidazoles or
 triazinylbenzimidazoles)

IT 269720-52-7P 269721-99-5P
 RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (synergistic agrochem. microbicides contg. pyrimidinylbenzimidazoles or
 triazinylbenzimidazoles)

TI Low-phytotoxicity fungicide sprays.
IN Schussler, Jeffrey R.; Moser, Robert E.; Crosby, Kevin E.; Washington, John R.
PA Syngenta Ltd., UK
SO U.S., 8 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A01N025-32
 ICS A01N027-00; A01N037-34; A01N037-44; A01N037-46; A01N043-52;
 A01N043-653; A01N047-12
NCL 514520000
CC 5-2 (Agrochemical Bioregulators)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | US 6319949 | B1 | 20011120 | US 1996-740834 | 19961104 |
| PRAI | US 1996-21536 | | 19960711 | | |

AB A method is given for preventing fungal diseases in crops which comprises the steps of: (a) applying to a crop an aq. or a nonaq. spray compn. which includes a pesticide and a spray adjuvant including a solvent and an emulsifier, wherein the solvent is a mixt. of aliph. hydrocarbons having a distn. range of 520 to 600.degree. F and an arom. content of .ltoreq.1 % or the solvent is a single or combination of C6-C18 fatty alc.(s); and (b) applying chlorothalonil to the crop previously to, simultaneously with, or subsequently to the application of the aq. spray compn., wherein phytotoxicity assocd. with the application of chlorothalonil is reduced or eliminated.

ST fungicide spray agrochem

IT Fungicides

(agrochem.; low-phytotoxicity fungicide sprays)

IT Hydrocarbons, uses

RL: MOA (Modifier or additive use); USES (Uses)

(b. 520-600.degree. F; low-phytotoxicity fungicide sprays contg.)

IT Alcohols, uses

RL: MOA (Modifier or additive use); USES (Uses)

(fatty, C6-18; low-phytotoxicity fungicide sprays contg.)

IT Pesticide formulations

Sprays

(low-phytotoxicity fungicide sprays)

IT Paraffin oils

RL: MOA (Modifier or additive use); USES (Uses)

(low-phytotoxicity fungicide sprays contg.)

IT 148-79-8, Thiabendazole 1897-45-6, Chlorothalonil 17804-35-2, Benomyl 23564-05-8, Thiophanate-methyl 35554-44-0, Imazalil 36734-19-7, Iprodione 57837-19-1, Metalaxyl 60168-88-9, Fenarimol 60207-90-1, Propiconazole 70630-17-0, Mefenoxam 79983-71-4, Hexaconazole 107534-96-3, Tebuconazole 114369-43-6, Fenbuconazole 131860-33-8, Azoxystrobin 133855-98-8, Epoxiconazole 143390-89-0, Kresoxim-methyl

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)

(low-phytotoxicity fungicide sprays contg.)

IT 112-53-8, Dodecanol 112-72-1, Tetradecanol

RL: MOA (Modifier or additive use); USES (Uses)

(low-phytotoxicity fungicide sprays contg.)

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD

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 (40) Wilde; US 4990342 1991 CAPLUS
 (41) Winston; US 5496568 1996 CAPLUS
 (42) Woods; US 5380484 1995

REFERENCE 7

AN 135:299954 CA
 TI Fungicidal compositions comprising methoxyiminoacetamide derivatives.
 IN Wachendorff-Neumann, Ulrike; Seitz, Thomas; Gayer, Herbert; Heinemann,
 Ulrich; Krueger, Bernd-Wieland; Kraemer, Wolfgang; Assmann, Lutz
 PA Bayer A.-G., Germany
 SO Ger. Offen., 40 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM A01N035-10
 ICS A01N043-653; A01N039-02; A01N059-16; A01N047-10; A01N043-828;
 A01N043-88
 CC 5-2 (Agrochemical Bioregulators)

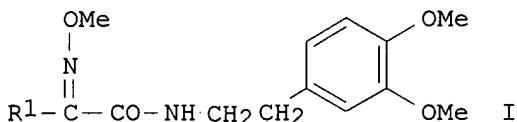
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|---|----------|------------------|----------|
| PI | DE 10019758 | A1 | 20011025 | DE 2000-10019758 | 20000420 |
| | WO 2001080641 | A2 | 20011101 | WO 2001-EP4042 | 20010409 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, | | | |

VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI DE 2000-10019758 20000420

GI



- AB Fungicidal compns. comprise methoxyiminoacetamide derivs. I (R1 = fluorine-, chlorine-, bromine-, Me-, Et-, Pr- iso-Pr-, Bu-, iso-Bu-, tert-Bu-, methoxy-, ethoxy- or phenoxy-substituted or unsubstituted Ph, 2-naphthyl, 1,2,3,4-tetrahydronaphthyl, indanyl, 2-benzofuranyl, 2-benzothienyl, 2-thienyl or 2-furanyl) and any of known 58 fungicides.
- ST fungicide methoxyiminoacetamide deriv mixts
- IT Fungicides
 (compns. comprising methoxyiminoacetamide derivs.)
- IT 133-06-2D, Captan, mixts. with methoxyiminoacetamide derivs. 133-07-3D, Folpet, mixts. with methoxyiminoacetamide derivs. 137-26-8D, Thiram, mixts. with methoxyiminoacetamide derivs. 731-27-1D, mixts. with methoxyiminoacetamide derivs. 1085-98-9D, mixts. with methoxyiminoacetamide derivs. 1897-45-6D, Chlorothalonil, mixts. with methoxyiminoacetamide derivs. 8018-01-7D, Mancozeb, mixts. with methoxyiminoacetamide derivs. 12071-83-9D, Propineb, mixts. with methoxyiminoacetamide derivs. 12122-67-7D, Zineb, mixts. with methoxyiminoacetamide derivs. 12427-38-2D, Maneb, mixts. with methoxyiminoacetamide derivs. 13598-36-2D, Phosphonic acid, mixts. with methoxyiminoacetamide derivs. 24579-73-5D, Propamocarb, mixts. with methoxyiminoacetamide derivs. 32809-16-8D, Procymidone, mixts. with methoxyiminoacetamide derivs. 36734-19-7D, Iprodione, mixts. with methoxyiminoacetamide derivs. 39148-24-8D, Fosetyl-Al, mixts. with methoxyiminoacetamide derivs. 53112-28-0D, mixts. with methoxyiminoacetamide derivs. 57837-19-1D, Metalaxyl, mixts. with methoxyiminoacetamide derivs. 57966-95-7D, Cymoxanil, mixts. with methoxyiminoacetamide derivs. 60207-90-1D, Propiconazole, mixts. with methoxyiminoacetamide derivs. 66246-88-6D, Penconazole, mixts. with methoxyiminoacetamide derivs. 67747-09-5D, Prochloraz, mixts. with methoxyiminoacetamide derivs. 70630-17-0D, Metalaxyl M, mixts. with methoxyiminoacetamide derivs. 71626-11-4D, Benalaxyl, mixts. with methoxyiminoacetamide derivs. 77732-09-3D, Oxadixyl, mixts. with methoxyiminoacetamide derivs. 79622-59-6D, Fluazinam, mixts. with methoxyiminoacetamide derivs. 79983-71-4D, Hexaconazole, mixts. with methoxyiminoacetamide derivs. 85509-19-9D, Flusilazole, mixts. with methoxyiminoacetamide derivs. 87130-20-9D, Diethofencarb, mixts. with methoxyiminoacetamide derivs. 88671-89-0D, Myclobutanil, mixts. with methoxyiminoacetamide derivs. 94361-06-5D, Cyproconazole, mixts. with methoxyiminoacetamide derivs. 104030-54-8D, Carpropamid, mixts. with methoxyiminoacetamide derivs. 107534-96-3D, Tebuconazole, mixts. with methoxyiminoacetamide derivs. 110488-70-5D, Dimethomorph, mixts. with methoxyiminoacetamide derivs. 112281-77-3D, Tetraconazole, mixts. with methoxyiminoacetamide derivs. 114369-43-6D, Fenbuconazole, mixts. with methoxyiminoacetamide derivs. 117428-22-5D, Picoxystrobin, mixts. with methoxyiminoacetamide derivs. 118134-30-8D, Spiroxamine, mixts. with methoxyiminoacetamide derivs. 119446-68-3D, Difenoconazole, mixts. with methoxyiminoacetamide derivs. 120116-88-3D, Cyamidazosulfamid, mixts.

with methoxyiminoacetamide derivs. 121552-61-2D, mixts. with
methoxyiminoacetamide derivs. 124495-18-7D, Quinoxifen, mixts. with
methoxyiminoacetamide derivs. 126833-17-8D, Fenhexamid, mixts. with
methoxyiminoacetamide derivs. 131341-86-1D, Fludioxonil, mixts. with
methoxyiminoacetamide derivs. 131752-26-6D, mixts. with
methoxyiminoacetamide derivs. 131807-57-3D, Famoxadone, mixts. with
methoxyiminoacetamide derivs. 131860-33-8D, Azoxystrobin, mixts. with
methoxyiminoacetamide derivs. 133855-98-8D, Epoxiconazole, mixts. with
methoxyiminoacetamide derivs. 135158-54-2D, Acibenzolar-S-methyl, mixts.
with methoxyiminoacetamide derivs. 138261-41-3D, Imidacloprid, mixts.
with methoxyiminoacetamide derivs. 140923-17-7D, Iprovalicarb, mixts.
with methoxyiminoacetamide derivs. 141517-21-7D, Trifloxystrobin, mixts.
with methoxyiminoacetamide derivs. 143390-89-0D, Kresoxim-methyl, mixts.
with methoxyiminoacetamide derivs. 149708-54-3D, mixts. with
methoxyiminoacetamide derivs. 156052-68-5D, Zoxamide, mixts. with
methoxyiminoacetamide derivs. 161326-34-7D, Fenamidone, mixts. with
methoxyiminoacetamide derivs. 162650-77-3D, Ethaboxam, mixts. with
methoxyiminoacetamide derivs. 172524-76-4D, mixts. with
methoxyiminoacetamide derivs. 172719-88-9D, mixts. with
methoxyiminoacetamide derivs. 175013-18-0D, mixts. with
methoxyiminoacetamide derivs. 178928-70-6D, mixts. with
methoxyiminoacetamide derivs. 181624-76-0D, mixts. contg.
181627-13-4D, mixts. contg. 184870-42-6D, mixts. with
methoxyiminoacetamide derivs. 185336-79-2D, mixts. with
methoxyiminoacetamide derivs. 188027-78-3D, mixts. with
methoxyiminoacetamide derivs. 188425-85-6D, mixts. with
methoxyiminoacetamide derivs. 189892-69-1D, mixts. with
methoxyiminoacetamide derivs. 193740-76-0D, mixts. with
methoxyiminoacetamide derivs. 198758-59-7D, mixts. with
methoxyiminoacetamide derivs. 251579-08-5D, mixts. with
methoxyiminoacetamide derivs. 345206-00-0D, mixts. with
methoxyiminoacetamide derivs. 367262-88-2D, mixts. contg.
367262-94-0D, mixts. contg. 367262-97-3D, mixts. contg. 367263-03-4D,
mixts. contg.

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(fungicidal compns.)

REFERENCE 8

- AN 135:299774 CA
TI Physiological Effects of Azoxystrobin and Epoxiconazole on Senescence and the Oxidative Status of Wheat
AU Wu, Yue-Xuan; von Tiedemann, Andreas
CS Department of Phytomedicine, Faculty of Agriculture, University of Rostock, Rostock, 18051, Germany
SO Pestic. Biochem. Physiol. (2001), 71(1), 1-10
CODEN: PCBPBS; ISSN: 0048-3575
PB Academic Press
DT Journal
LA English
CC 4-4 (Toxicology)
Section cross-reference(s): 11
AB The impact of 2 fungicides, azoxystrobin and Epoxiconazole, on the senescence process of spring wheat (*Triticum aestivum* L. cv. Nandu) grown under greenhouse conditions until maturity was investigated. The senescence process could be well described by the decrease in total leaf protein content and the increase in electrolyte leakage from leaf tissue. The changes in these 2 senescence factors coincided with an increase in the level of superoxide (O₂•) and a decrease in the activity of the antioxidant enzyme superoxide dismutase (SOD) during senescence. The senescence was significantly delayed by application of azoxystrobin and Epoxiconazole, which induced an increase in total SOD activity and a redn.

of O₂ levels, particularly at mature growth stages. The activity of peroxidase in fungicide-treated plants was approx. 2 times higher in flag leaves and 3-4 times higher in f-1 leaves than in untreated plants. Addnl., levels of H₂O₂ were significantly elevated in fungicide-treated plants. Paraquat induced a substantial increase in O₂ levels at growth stages later than GS 65/69, being much delayed and reduced by azoxystrobin and Epoxiconazole. At later growth stages (GS 59/61), azoxystrobin and Epoxiconazole showed similar effects in delaying the senescence of wheat plants, but azoxystrobin was more efficient when applied at early growth stages (GS 31/32). The results suggest that the fungicide-induced delay of senescence is due to an enhanced antioxidative potential protecting the plants from harmful active oxygen species. Thus, ethylene redn. may not be the primary mechanism by which strobilurins or triazoles interfere with the senescence process, as previously suggested, but may be rather a consequence of reduced oxidative stress in the plant tissue. Elevated levels of H₂O₂ possibly play a key role as second messengers in inducing the expression of antioxidant genes in the fungicide-treated plants. (c) 2001 Academic Press.

- ST wheat senescence oxidative stress azoxystrobin Epoxiconazole; Triticum
senescence oxidative stress fungicide
- IT Growth and development, plant
Protein degradation
(physiol. effects of azoxystrobin and Epoxiconazole on growth and
oxidative status of wheat)
- IT Fungicides
Oxidative stress, biological
Senescence, plant
Wheat
(physiol. effects of azoxystrobin and Epoxiconazole on senescence and
oxidative status of wheat)
- IT 4685-14-7, Paraquat 131860-33-8, Azoxystrobin 133855-98-8,
Epoxiconazole
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(physiol. effects of azoxystrobin and Epoxiconazole on senescence and
oxidative status of wheat)
- IT 9003-99-0, Peroxidase 9054-89-1, Superoxide dismutase
RL: BAC (Biological activity or effector, except adverse); BIOL
(Biological study)
(physiol. effects of azoxystrobin and Epoxiconazole on senescence and
oxidative status of wheat)
- IT 7722-84-1, Hydrogen peroxide, biological studies 11062-77-4, Superoxide
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(physiol. effects of azoxystrobin and Epoxiconazole on senescence and
oxidative status of wheat)
- RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
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REFERENCE 9

AN 135:238069 CA
 TI Pesticide formulations containing cyclohexanopolycarboxlic acid esters
 IN Kober, Reiner; Bratz, Matthias; Berghaus, Rainer; Breitscheidel, Boris
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 38 pp.
 CODEN: PIXXD2

DT Patent

LA German

IC ICM A01N025-04

ICS A01N025-02; A01N043-84

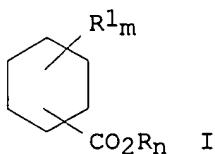
CC 5-4 (Agrochemical Bioregulators)
 Section cross-reference(s): 24

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|--|----------|
| PI | WO 2001067860 | A1 | 20010920 | WO 2001-EP2764 | 20010312 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | |

PRAI DE 2000-10012161 20000313

GI



AB The title formulation contains in relation to the total wt. of the formulation: (a) 20-99.9 % by wt. cyclohexanopolycarboxlic acid ester I ($R_1 = C_1-C_{10}$ alkyl or C_3-C_8 cycloalkyl; $m = 0, 1, 2$ or 3 ; $n = 2, 3$ or 4 ; $R = H$ or C_1-C_{30} alkyl); (b) 0-70 % water; (c) 0.1-60 % auxiliary agent and/or additive; (d) 0-70 % active ingredient. The alc. component of cyclohexane-1,2-dicarboxylic acid diisononyl ester is prep'd. by butene dimerization, followed by hydroformylation and hydrogenation.

ST pesticide formulations cyclohexanopolycarboxlic acid esters

IT Pesticide formulations

(pesticide formulations contg. cyclohexanopolycarboxlic acid esters)

IT 67564-91-4, Fenpropimorph 133855-98-8

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(pesticide formulations contg. cyclohexanopolycarboxlic acid esters)

IT 1687-30-5D, Cyclohexane-1,2-dicarboxylic acid, diesters 84731-64-6,

Cyclohexane-1,2-dicarboxylic acid diisodecyl ester 166412-78-8,

Cyclohexane-1,2-dicarboxylic acid diisononyl ester 192728-83-9,

Cyclohexane-1,2-dicarboxylic acid diisoheptyl ester 228853-14-3

RL: MOA (Modifier or additive use); USES (Uses)

(pesticide formulations contg. cyclohexanopolycarboxlic acid esters)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

(1) Basf Ag; DE 19701123 A 1997 CAPLUS

(2) Breitscheidel, B; WO 9932427 A 1999 CAPLUS

(3) New Japan Chem Co Ltd; WO 9721792 A 1997 CAPLUS

(4) Schoenherr, J; EP 0579052 A 1994 CAPLUS

REFERENCE 10

AN 135:222738 CA

TI Cereal head blight disease, mycotoxins and fungicide treatments

AU Ioos, Renaud; Faure, Alain

CS LNPV, Laboratoire national de la protection des vegetaux, Unite de Mycologie Agricole et Forestiere, Nancy, 54043, Fr.

SO Phytoma (2001), 539, 56-63

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